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The **MARINE CORPS GAZETTE**

Colonel Louis McC. Little, U. S. Marine Corps, Editor

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The Tomb of Columbus, Santo Domingo City, D. R.

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PRESERVING THE MARINE TRADITIONS IN THE LAND COLUMBUS LOVED

By COLONEL H. C. REISINGER, U. S. M. C.

EDITOR'S NOTE: This article was written just before the recent revolution in Santo Domingo which forced President Vasquez out of office and brought about the formation of a provisional government pending a popular election. Up to the time of going to press no detailed information had reached the United States regarding the behavior of the Dominican Army, but press dispatches indicate that it was a stabilizing force which guarded the country from looting and unnecessary bloodshed.

UPON RETURNING to Headquarters from my recent inspection trip to St. Thomas and Haiti, it was suggested that for the information of those marine officers who had not had the good fortune to visit Santo Domingo since the Occupation, my interesting and agreeable experiences in that country be made the subject of an article in the GAZETTE. To the writer this experience was unique. This Occupation was the first, so far as he knows, completed effort on the part of the Marine Corps to leave behind it in a foreign country a stabilizing force trained by marine officers. The accomplishment of that mission without embitterment was a remarkable feat. While politically many of the Dominicans objected to this Occupation and may still feel that it was unjustified, the successful effort of the Marine Corps to leave stability in the wake of the Occupation was certainly appreciated.

Upon completion of my duty in the Virgin Islands, my orders called for certain inspections in Haiti, beginning with Cape Haitien. There is but one direct method of which the writer knows in reaching Haiti from Porto Rico and that is by the new Pan-American Airway Company. Being barred from the use of air transportation by the presence of two trunks containing our uniforms, we had to resort to steamship. It may not be generally known that there is no direct steamship line operating from Porto Rico to Haiti and that the only method of entering the latter country from Porto Rico is through Santo Domingo.

We arrived at Santo Domingo City aboard the "SAN LORENZO" early on the morning of November 19, 1929, and anchored well out in the

Caribbean Sea. There are still no facilities for loading and unloading large ships except by lighters, but we were told that the Dominicans have let a contract for the building of a breakwater and mole on the south side of the city that will afford adequate and protected docking facilities for large ships, and a ready means of loading and unloading. It is understood that this project will cost about \$2,000,000 and the contract calls for completion within the next two years.

The outstanding object to meet the eye on coming into Santo Domingo Harbor is the unsightly wreck of the "MEMPHIS". This ship is still resting on the ledge just to the west edge of town on an even keel and while intact with the exception of the loss of one of its stacks, it is weather-worn, rusty and a most forlorn object. It seems a pity that such an eyesore cannot be removed either by our Government or by the Dominicans, for the prospect as viewed from the sea is otherwise exceedingly attractive. Santo Domingo has many fine buildings which were, that morning, beautifully set off by the cloudless tropical sky, the green foliage and the deep turquoise of the sea. Consulting a map which was given me during my visit, I found that the city was founded by Bartolome Colon, a brother of Christopher Columbus, on the 4th of August, 1496, which probably entitles it to be called the oldest city in the Americas. However, this city is not the one one sees today. The original city was on the left bank of the Ozama River and moved to its present location on the right bank in 1502 by the Commendador Ovado.

Shortly after we anchored I received a pleasant surprise and an inkling of the courtesy to be accorded us during our passage through Santo Domingo. A shore boat came alongside and from it an officer came aboard who at first glance one would take for a marine. Every detail of his uniform with the exception of the rank and national insignia was exactly like our own. This officer, after making inquiries, came to me and reported as my aide during, as he expressed it, "your tour through the Republic of Santo Domingo." He was Second Lieutenant Nacisio Roman of the Dominican Army. He informed me that he had been instructed to report to me by General Rafael Trujillo who commands the Dominican Army. Concealing my surprise while voicing my pleasure, it was explained to him that we were simply passing through to Haiti and had no official duties nor status in Santo Domingo. He replied that that was understood but they regarded it as a privilege to look out for us and see that we enjoyed our visit. He certainly fulfilled his mission, for during our stay he was ever present and courteously active in arranging all details of the trip. Later, we commented on his uniform with respect to its striking similarity to our own, and immediately received the impression which was to follow us throughout our intercourse with the Dominican Army—these officers appeared to place the highest value upon the instructions they had received from the Marine Corps during the Occupation, and that in appreciation of these efforts of the Marine officers who schooled the Guardia, it has become the pride and pleasure of the Dominican Army to preserve in

every way possible the traditions and standards of the Marine Corps. It should be explained that the present "Ejercito Nacional" is built upon the Guardia established by the Marine Corps during the Occupation. In subsequent contact with the officers of the Dominican Army we were constantly impressed with this spirit. They appeared to take the most evident pride in their similarity to our Corps, not only in their uniform and equipment, but in the neatness and cleanliness of their barracks, their drills, discipline and carefully maintained military bearing. All officers of the Dominican Army wear the Marine Corps sword, to complete their likeness to their instructors.

Under the guidance of Lieutenant Roman, Chief Pay Clerk Sisk, who accompanied me on this inspection trip, and the writer went ashore. After entering the Ozama River we landed at the Customs House. Coming in we passed the Homage Tower which is included in part of the Fort, now the Headquarters of the Dominican Army. This is said to be the first building erected when the city was moved across the river to its present site. When we arrived at the Customs House our baggage was taken charge of by several Dominican soldiers in marine uniforms and the customs inspector, who turned out to be an ex-quartermaster sergeant of the Marine Corps, Frank J. Rothenburgh, discharged in 1924, went through the examination of our baggage in short order. He is now a special inspector. While manifestly glad to see some one of the Marine Corps again, he nevertheless seemed well pleased with his lot in Santo Domingo. According to Rothenburgh, it is a great country and personally the writer agrees with him. After clearing customs, we found a seven-passenger Packard car waiting for us driven by a Dominican soldier in uniform, and again the likeness to the Corps was striking. In this style we entered the "Land that Columbus Loved"—you see, they have joined the sloganeers. Progressive and up and coming—that's Santo Domingo.

From then on, until the writer bade goodbye to his guide in Haitian territory, our party was never unchaperoned—it was a personally-conducted tour. What we saw it is presumed we were intended to see, and what we heard we were intended to hear. Maybe the impressions created were inspired, but the writer takes this occasion to state that they were highly agreeable.

The next hour was consumed in making a call on the American Minister, Mr. Evans Young, and on the Vice-Presidente. The American Minister's residence and that of the Presidente's are close together and both are on the hill in the northwestern section of the city. On the way to Mr. Young's residence we were shown the site of the Marine Camp Lowe. Through Mr. Young, whom we found to be a fine looking gentleman of most agreeable manner, an appointment was made with the Vice-Presidente and we went immediately to call on him. The Presidential residence is a very handsome building of white marble and stands in an attractive garden with excellent approaches. At the time of my visit the Presidente, Senor Vasquez, was in the United States undergoing treatment at Johns Hopkins Hospital. The

Vice-Presidente expressed himself as interested in our visit and was courteously hopeful that our time in his country would prove entertaining and pleasant. Courtesy, friendliness, quiet dignity—these seemed to be his innate characteristics. From the call on the Vice-Presidente we went to the cuartel which was the Headquarters of General Trujillo. This is the old Fort Ozama enclosure, used by the marines as a prison and provost center. On the way through the city several times we saw men in uniform that we could have sworn were marines, but each time we found, much to the amusement of Lieutenant Roman, that they were Dominican soldiers. The city itself is exceedingly attractive, there being many handsome buildings, very solidly and substantially built, surrounded by a profusion of color. Flowers seemed to grow in every corner and to thrive wherever planted. The trees were luxuriant; there was no evidence of destruction wrought by recent hurricanes such as we saw on every hand in Porto Rico. While we found the streets clean and the city well kept, the surfaces of the streets were in bad condition. This was due to the placing of sewerage, telephone, telegraph and electric light wires underground. The Dominicans have undertaken a very ambitious program for the beautification and improvement of this, their principal city. Contracts have been let requiring completion within the next year for the resurfacing of all streets.

Coming into the cuartel was like entering a marine post. The sentry on duty was smart and alert and those of the guard that we saw were well equipped and dressed in clean, well-fitting uniforms. We found General Trujillo to be a very handsome, soldierly officer, dressed in a uniform that would have satisfied the most fastidious and critical. He is a youngish man possessed of a great deal of dignity combined with a most pleasing personality. He was very patient with the writer's Spanish, which had not been used for some twelve years, and we managed very well with the assistance now and then of Lieutenant Roman in our subsequent talks. It was quite evident that the General had arranged every detail of our trip and felt that it was a pleasure to see that we enjoyed our stay in Santo Domingo. General Trujillo, who began his service with the Dominican Army in the Guardia when it was being instructed by the Marine Corps, mentioned many marine officers who had been in Santo Domingo and particularly paid tribute to Colonel Cutts, the last commanding officer of the Guardia before the Evacuation. Under his guidance the lessons taught by marines to the soldiers of Dominica are carefully preserved and the Corps spirit fostered. They use the drill book handed down to them, the only departure being that commands and instructions are in Spanish. The writer was very much interested upon receiving a copy of "La Revista," the magazine of the Dominican Army, to find on the front page printed in Spanish our general orders to sentinels. We were told that this was never absent from any copy of the publication.

Inside the fort enclosure there is a large quadrangle which, at the time of our visit, was well filled with soldiers undergoing various forms of drill

and training. There was about the place an air of activity and industry and the soldierly appearance of the officers and enlisted men was quite impressive. The officers were well dressed and their uniforms were of excellent cut and fit. The enlisted men were well set up, generally tall and strong. The average Dominican soldier compares most favorably with our own in appearance.

While the Ejercito Nacional is quite impressive, it has so far not been put to that test to which it may some day be subjected, and that is, whether in emergency it will turn out to be the stabilizing force in Santo Domingo, the end for which it was trained by officers of the Marine Corps. If this test is applied and this body of trained troops remains non-partisan and loyal to existing government, then the work of the Marine Corps may be said to have been successfully performed.

At this time we were not in uniform but it soon became known that we were marine officers and our visit was manifestly a matter of interest to all. We were made to feel welcome on every hand.

After lunch we made a second visit to the Headquarters of the Dominican Army to say goodbye to the General and to thank him for his courtesy. We were much interested in seeing a large class of officers under instruction. This Officers' School is maintained as a part of their daily program.

When one considers that the last of the marine forces were withdrawn from Santo Domingo late in August, 1924, and that this was the condition which we found existing over five years afterwards, it should certainly be gratifying to the Marine Corps we know the esteem in which they are held by these Dominican officers and soldiers.

After leaving General Trujillo's Headquarters in the morning, we called on the American Consul General. While in his office it was tactfully suggested by Lieutenant Roman that should we don our uniforms; it would be a compliment to the Dominican Army. After talking this proposition over with the American Consul General it was decided to comply with this suggestion and we went to the Hotel Fausto where our baggage had been taken and a room engaged for us. The writer imagines that the Fausto will bring back many pleasant memories to some of the marine officers who took part in the Occupation, for they told me that it was here that most of the dances and social functions took place during that period. We found the hotel clean and well equipped and its service excellent. When we appeared in our uniforms we were immediately greeted with special attention and courtesies from the hotel people.

The general attitude of the people of Santo Domingo to the writer was somewhat of a surprise, for he had been given to understand that there existed a feeling of hostility to Americans due to the military Occupation. At no time during his stay in Santo Domingo did he encounter the slightest evidence of hostility or discourtesy on the part of any inhabitant; in fact, on the other

hand, it seemed that the people made special effort to be courteous and pleasant when we had on our uniforms and were identified as marine officers. The country, as well as the cities, seemed very orderly and the people quiet and self-contained.

The shift from "cits" to uniform being accomplished, there followed a sight-seeing tour through the city and its vicinity, with Lieutenant Roman acting as official guide. We did the regular tourist route, apparently the Teniente did not overlook anything—Diego Columbus' Castle, the Columbus Tree, the Treasury, San Geronimo and the Fortifications at Haina. Later, we visited the Cathedral. At Haina, we were told, had been located the principal training center conducted by the Marine Corps for the instruction of the Dominicans. The old fortress that we were shown was one of the best examples of small forts we had seen during our trip. On our way back to the city from Haina as we were passing through a wide street—Independencia, I believe—Lieutenant Roman pointed out to me a house saying: "There is the house where Senor Coronel Cutts lived." To my surprise the house indicated was quite small, and the writer remarked that the Colonel must have had some difficulty in getting in and out. "Paré!" cried Lieutenant Roman. Immediately, the automobile stopped and at his direction backed up; then he pointed out to me a house adjacent to the small one—a very large house with plenty of room in it and around it—and informed me that that was the casa occupied by "Senor Coronel Cutts." He was not going to let me get by with my jest about the small house. It struck the writer as a special tribute to the patient efforts of the Colonel that this Lieutenant of the Dominican Army should take pains to drive me past the house occupied by Colonel Cutts, the last Commandant of the Guardia Nacional before the evacuation. They hold him high in their affection; that was plainly evident.

After our return to the city we went through the Cathedral, the most beautiful building of its kind the writer has ever seen. With a sacristan as our guide we were shown the spot where the remains of Christopher Columbus were discovered in September, 1877, and the claim that the Spaniards had removed his remains to Cuba refuted. The present tomb of Columbus, said to have cost in the neighborhood of \$200,000.00, is very beautiful, if a bit ornate. The delicacy of the carvings and the elaborate detail of this tomb are a bit out of place, in the opinion of the writer, with the general tone and architectural plan of the interior of the Cathedral, and it might have been well to have placed so beautiful a thing in a special building. The sacristan, having finished the tour of the Cathedral, led us carefully past the poor box and we made our contribution. Then he took us to the office and there we were given some very interesting literature dealing with the Cathedral and the life of the famous navigator.

From the Cathedral we returned to Fausto Hotel. Soon after our arrival a number of Dominican officers came to call and we spent a very pleasant half hour with them. At lunch the ubiquitous newspaper reporter showed up but

was successfully disposed of with the explanation that we were merely passing through Santo Domingo, enjoying the hospitality of its army. The result of the interview we did not discover until reaching Port au Prince when the following article from "La Opinion" was brought to our attention:

"An American Colonel Visits Us."

"Colonel Reisinger of the U. S. Marines arrived this morning. . . . He is making but a brief stay and is on his way to the neighboring Republic of Haiti, where he has been sent, according to what he tells us. . . . Immediately after his arrival he proceeded to the Palais where he had a long interview with the Acting Presidente, Dr. Jose Dolores Alfonseca, regarding matters of which we are ignorant.

"As soon as he left the Presidente' Palace . . . he called upon Brigadier General Gal. Rafael L. Trujillo with whom he had a long talk on subjects of which we have no knowledge.

"The Colonel lunched at the Fausto Hotel at 12:30 in company with his Aide and Captain Nicasio of the National Army.

"During this interview he was approached by reporters and in the course of an interview . . . remarking that he was merely passing through Santo Domingo on his way to the Republic of Haiti and that he had worn his official uniform in Dominican territory at the word of his friends that by so doing he would not suffer any inconvenience from this fact.

"Various stories were circulated in connection with the arrival of the Colonel to which we give no credit at present as they seem to us to be of a fantastic nature."

It seemed, after all, that journalism in Santo Domingo has somewhat the same flavor as is found in the United States. The "fantastic" stories connected with our stop in Santo Domingo never caught up with us; if we caused any excitement it was not apparent and it must have followed in the wake of our passage through.

After lunch and the return to the cuartel to say goodbye to General Trujillo, we left Santo Domingo City, with Santiago as our objective. Our route was over the Duarte Highway that leads through Bonao, Rincon, La Vega and Moca, which is the main road connecting Santo Domingo, Santiago and Monte Cristi. This road, we were given to understand, was rebuilt and improved during the American Occupation. It has since been kept in excellent condition and although we encountered heavy showers in crossing the hills, the Cordillera Central, the road surface remained firm and was well drained. Over it now passes a steady flow of traffic from Puerto Plata, Monte Cristi and Santiago. The country seemed generally busy and prosperous and a large quantity of produce and freight was moving over the road

by motor van and truck. The crops were abundant but the collapse of the coffee market was being felt here as in Haiti. Santo Domingo, through the progressive policy of its administration, now boasts of some 1200 kilometers of excellent highways connecting its principal cities of the north and south.

Shortly after leaving Santo Domingo City we passed on our left a large aviation field which is used by the Pan-American Airways Corporation now connecting Cuba, Porto Rico, Haiti and Santo Domingo with the United States. The Dominicans have become air-minded and a school of aviation is maintained at this field for their officers. Further, the writer was told that they are soon to acquire airplanes as part of their military development. En route we stopped at a number of villages for a cup of the delicious Dominican coffee, and late in the afternoon reached Bonao. There we halted for supper. The Chinese restaurant which Teniente Roman recommended left much to be desired in the way of its appointments but nothing in the way of food. We were served a wild pigeon casserole and alligator pear salad that would have done credit to Delmonico's in its palmiest days. A ragged boy was sent in to run the victrola, a horse-voiced machine, and while we dined in a riot of discord, every available aperture of the room was crowded with heads of curious townpeople. Our arrival had certainly created a stir but their interest was decidedly friendly.

After our dinner we took up the journey to Santiago and reaching there put up at the Palace Hotel. Those who are familiar with the appointments of the old Palace will understand when the writer states that a departure scheduled for 4:30 the next morning was somewhat of a pleasant prospect. In justice to Santiago's progress, it must be reported that there has been built a new "Palace"—a very substantial and modern building, but it was not open at the time of our visit. The little we saw of the city by night made us regret that we could not spend the next day there for further contact with the people and more sightseeing. Particularly we would have liked to see the ruins of "Santiago de los Caballeros" destroyed by earthquake in 1564. Our stay in Santiago, although brief, was very pleasant, and again we encountered the same friendly spirit that had been exhibited towards us during the entire trip.

Leaving Santiago at 5 o'clock the next morning, we pushed on through the early dawn to Monte Cristi, where we again hit the sea after a ride of about 300 kilometers. The morning ride was actually cold until the sun came up. At Monte Cristi we had a very good breakfast at a cafe operated by an old lady who, after complaining about the hard times, ingenuously inquired if she might hike the price for breakfast from 25 cents to 40 cents a head. We agreed. For this latter sum she gave us all the fruit we could eat, all the coffee we could drink, all the bacon and eggs that we could consume and rolls enough for twice our number. The "montequilla" intended for our rolls, was left untouched, but the memory of its aroma lingers even to this day.

Aside from this latter item on the menu we thoroughly enjoyed our "almuerzo."

After breakfast we left Monte Cristi for Dajabon. The first 8 or 9 kilometers of this road had been reconstructed and were splendid. This is part of the program to carry the road system of Santo Domingo straight through to connect with the Haitien highway in the north at Ouanaminthe. On the South the road from Santiago through Comendadore leading into Port au Prince is now open. After leaving this good stretch of road we bumped over the old road for 6 or 7 kilometers. It was firm, if rough. About 6 kilometers from Dajabon we turned off into a lowland road and then encountered the worse stretch of morass the writer had ever seen. For some 5 miles we floundered and wallowed through this apology for a road, the chauffeur displaying exceptional skill in negotiating it. This stretch alone took us about an hour and a half and almost expended the driver. After bogging down three times and being helped out by willing natives, we eventually reached Dajabon. There we crossed the river—getting stuck again in mid-stream—and came out on the other side to find ourselves in Haitien territory and soon in the small station of Ouanaminthe. From inquiry we were told that our experience on this stretch of road and in the river was not exceptional.

From Ouanaminthe we ran in to Cape Haitien without further difficulty and there we parted company with our faithful guide, Teniente Roman. He had been unfailingly thoughtful of our comfort and convenience and by his efforts made the trip a decided success.

Although ahead of us we found the good roads, good company and the wholehearted hospitality of Haiti, the writer looks back upon his journey through Santo Domingo as an exceptional experience in which the Santo Dominican Army, created through training of marine officers during the Occupation, still find it their privilege and pleasure to extend to the Marine Corps every courtesy and assistance that is possible.

MOTOR TRANSPORT FOR THE MARINE CORPS

By LIEUTENANT COLONEL WALTER N. HILL, U. S. M. C.

A STUDY of the records and reports from our two recent expeditions in China and Nicaragua conveys the impression that something was wrong with the impedimenta accompanying these operations. It seems that we may have wandered foolishly from one extreme to another. Days were, before the World War, when motor transport for the Marine Corps was a dream of luxury rather than a realized necessity. A few odd trucks, commandeered from some local contractor or borrowed from our only artillery battalion, constituted our equipment, which never reached proportions large enough to be actually referred to as motor transport.

To demonstrate, on the other hand, how far in this extreme we have gone, consider the following quotations, all bearing on this subject; first, from the Commanding General, Third Brigade, then on expeditionary duty at Tientsin, China, as follows:

"The question of motor transportation is one which deserves serious consideration by the Marine Corps, for, unless we change our present policy for one that is more up-to-date, economical and efficient, one of our greatest assets, namely, mobility, will become a mere matter of historical record".

Facts substantiated forcibly by the Fleet Marine Officer, who writes in part, as follows:—

"It becomes apparent that the amount of motor transportation that has accompanied the Third Brigade is unnecessary and could have been reduced by fifty per cent. In addition, it greatly reduces the mobility of the Brigade".

While the Commander-in-Chief, Asiatic Fleet, culminates the situation in a few words which are pregnant with significance:—

"I might explain that my concern in regard to the Marines in Tientsin has always been very decidedly increased because of the heavy equipment and artillery which accompanied this force. In wet weather, all this heavy equipment could only be moved from Tientsin *by water*, and this is by river, with many shoals and quite narrow, so that if there is any opposition from the Chinese, for the use of the river, it would be a case of fight one's way out".

In Nicaragua, while there seems little or no complaint of the amount or weight of the equipment furnished, it appears that the motor transport was unsuited to the conditions. A reference to this condition is found in a lengthy report from a Board on Motor Transportation which reads in part as follows:—

"Motor truck transportation will be used to some extent over the Matagalpa road during the dry season, but the bulk of the supplies will be handled by *bull carts*".

Subsequent to the World War, the Marine Corps has become afflicted with a desire to copy and adopt for its organization and equipment all things Army, a natural reaction, doubtless brought about by service in France, and attendance at Army Schools of numbers of marine officers. For a brief space we have lost sight of our primary missions, and figuratively speaking, forsee our future operations similar in character to those of recent experience, for which solutions are rendered as approved by Army Schools. We forget that the Army is organized and equipped as a machine for great wars against highly trained enemies operating in countries with modern road facilities. We forget that our Marine Corps missions rarely carry us into such conflicts, and our habitual enemies are seldom trained or organized, and dispute our advance only in roadless wildernesses.

It is evident, therefore, that we must study our past experiences, and consider what the future will call upon us for, when analyzing the problem of motor transport. In the past we needed no truck companies to penetrate roadless Haiti, or to march across Santo Domingo, and we unhesitatingly were ready to climb to Mexico City with what transport we could commandeer in the plain of Vera Cruz. On the other hand, guarding against any reactionary movement, we must bear in mind that we live today in a motor age, and must stand ready to adopt the machine when its assistance increases efficiency.

The various potential missions of the Marine Corps are so diversified that requirements for motor transport will never be the same in any two places. Each possible expedition therefore, must have an estimate of the situation of its own. And it surely comes within the scope of modern ideas of warfare to carefully estimate the situation before engaging in it. Waving aside other captions of the estimate, consider the logistics and, under logistics, dwell upon motor transport.

The paramount question is, what amount and what types of transportation are necessary? To reach a decision, an estimate of each particular operation is necessary. This decision must be made by the Division of Operation and Training, Headquarters Marine Corps. Plenty of data is available either in the Intelligent Section, Division of Operations and Training, or in the Office of Naval Intelligence. From these sources full and up-to-date road reports can be obtained on almost any theatre of operations. From this study the allowance of motor transport in the first expeditionary echelon can be quite closely estimated, an amount which should be an irreducible minimum.

The present Tables of Organization and Equipment are flexible enough to meet any requirements the decision may demand. The Brigade Train looks formidable, but is capable of being broken down to units which will support any combination of trucks or tractors. Whereas, the smallest unit is a platoon

with seven trucks or tractors, nothing prevents smaller units if the situation so demands. In this connection, a Marine Corps policy must develop which will prohibit any equipment accompanying the first echelon which might reduce mobility. The criterion should evolve that expeditions with no transportation at all, are better off than those hampered by heavy, useless impedimenta. Local resources may always be purchased or commandeered, while unsuitable equipment may stagnate the expedition to immobility, as was the case with the Third Brigade in China.

While this paper may appear to dwell particularly on the allotment of motor transport for infantry units, such is not the limitation, as serious consideration must be given to the allowances for special troops and artillery; our tables in these two branches show an excessive amount of vehicles which reach numbers little suited to our habitual activities. This is especially true of the separate artillery battalion, which is allotted 72 motor vehicles, exclusive of gun tractors! A further study will reveal the impossible character of many types, the most noteworthy being the artillery repair truck, 300 gallon water trailers, 750 gallon tank trucks, and artillery supply trucks, none of which should ever accompany the first echelon.

A revue of our expeditionary history will disclose only infrequent occasions when Marine Corps expeditions have called for artillery support. However, to meet this possible contingency it is granted that we do need some artillery, and, an artillery discussion being outside the field of this paper, the subject may rest on this assertion. But one fact must become fixed in our minds; if artillery comes with us, it must leave behind every bit of nonessential equipage. Class our artillery as a weapon of rare emergency, and we may well strip its accessories to guns, ammunition and fire direction instruments.

Practically the same decision must be reached concerning the motor transport of our special troops, which in a reinforced brigade reaches a total of 58 vehicles. Trucks, machine shop, Mack trucks, water purification units, and wrecking trucks, should never be assigned, unless especially required after the expedition has landed and has first-hand knowledge of the road situation. Where necessary, all of these units can find their substitutes in light mobile trucks or trailers. It is believed that the cross-country car will eventually take the place of the motorcycle. It possesses all the advantages of the motorcycle, and furthermore is more efficient in negotiating areas impracticable for the motorcycle. It can be used for distant reconnaissance, and is better suited than the motorcycle for use as a "Flying Patrol". The motorcycle, on the other hand, is very liable to crash, and its radius of activity is confined strictly to fairly good roads. The initial cost of the cross-country type is more but it is believed that the entire outlay for this sort of transportation, if expended solely for cross-country cars in lieu of passenger sedans, artillery reconnaissance cars, and motorcycles, would produce better results, and probably in the end tend towards economy.

Even within cities where well paved streets are found, the heavy motor truck finds no place in the motor transport for our expeditionary forces. Unless roads are heavily paved, these solid tire vehicles are useless. They should be abolished from our equipment table, and light trucks equipped with pneumatic tires, capable of 35 miles per hour substituted for them. The light truck is more efficient, has great versatility of action, and when loaded can make two trips to the heavy trucks one.

The question of trucks or tractors is entirely governed by local conditions. Tractors are capable of the greatest radius of action off roads or even across country. But under good or fair road conditions the light truck is superior. The percentages of each type sent with the expedition should be decided beforehand, when the equipment estimate is made. Tractors, when used, should not be heavier than two tons, which will serve all artillery purposes, as well as haulage. A lighter tractor, however, similar or identical to the Fordson, will prove a valuable addition. In any case, it is well established that tractors, with trailers, constitute the only motor transport suitable to accompany marching troops.

The rolling kitchen is not suited in any way for Marine Corps expeditionary forces. It is a contraption designed for use under excellent road conditions, under which conditions, our present field ranges afford better service. On the other hand, if operations carry our forces into any sort of rough country, Field Range No. 1, or the Phillips Pack Saddle Cooking Outfit, (Pony Type) are infinitely superior.

A handicap in the past has been the great variety of motor transport types with which our expeditionary forces have been supplied. This naturally necessitates a tremendous duplication of spare parts, and all manner of other difficulties as to repair and maintenance. No less than eighteen different models were sent with the Third Brigade. It would seem that with more discrimination this could be reduced to more reasonable figures, and the same amount of work accomplished. I find the following list, which seems a very practicable one:—

<i>Make</i>	<i>Model</i>
Ford.....	T, with cross-country and touring bodies.
Graham.....	2 ton, 6 cylinder trucks.
Caterpillar or Fordson.....	2 ton tractor for artillery and haulage.
Trailers.....	Any suitable type.

The passenger car is, to my mind, quite unnecessary for expeditionary work, and there should be substituted for it, cross-country cars. The only exception which might be made, would be a car suitable for the Commanding General, if such a rank commanded the expedition, and other conditions warranted such a car.

It is useless to send worn out and partially broken down transportation

on expeditionary service. The difficulties of the Transportation Officer are sufficient in any case without his being burdened with a lot of weary trucks and cars. Worn out transportation should be relegated to posts in the United States, and only new and serviceable equipment sent overseas. The expedition will be operating far from any supply base, and any assistance tending towards making it self-sustaining must be accorded it. When new transportation is secured, it should never be used farther than the "breaking in stage". It is believed that this practice is reasonable and possible, once started; as it simply amounts to a reversal of conditions at present. New equipment to overseas, and expeditionary reserves; old equipment from overseas to home stations. Repairs to old transportation at home will help keep the future expeditionary repair sections in training and add to their store of experience, which will be useful at some future time. This plan may not be necessarily true of all our permanent or semi-permanent foreign stations, such as the Virgin Islands, Guam, and Pearl Harbor; but it recently became strikingly true during the disturbances in Haiti, when a troop movement by trucks was necessary, and no serviceable trucks were available.

Tractors, (Caterpillar or Fordson, 2 ton) should be provided for almost every case, so that a system of supply may be established which will take advantage of all possible conditions, namely:—

From ship to shore.

Dock unloading, or lighters and boats.

From shore to base.

Light trucks, or tractors.

From base to secondary base, or troops.

Light trucks, tractors, native carts, or pack trains.

It is surprising how comparatively easy it is to adapt oneself to the conditions of surroundings. Inability to do this has caused many military disasters. General Braddock attempted to penetrate the wilderness and was crushed by his own impedimenta and inadaptability. Motor transport and the macadam roads of France impregnated us with a novel phase of warfare, while the trackless mountains of Nicaragua should reincarnate us into marines.

You ask now, doubtless, what this irreducible minimum of motor transport consists of. Opinions from all ranks vary so greatly on this, that no actual average would reconcile extremes. However, after much consideration, there is offered here a table showing a proposed allowance for the initial move:

Infantry Regiment (acting alone)

2 Ambulances

3 Cross-country cars (or 5 passenger sedans)

6 Bicycles

2 Motorcycles, with sidecars

2 One-ton trucks

Detachment from Brigade Train, consisting of :

1 Truck or Tractor Company (less one or two platoons)

To go further into the details of tables for higher units, special troops, and artillery, is a further study beyond the object of this paper. A policy is desired which will raise our future expeditions to higher standards of versatility and mobility.

Bearing all possible contingencies in mind, with special reference to the study, and estimate of the situation by the Division of Operations and Training; Headquarters Marine Corps will issue the necessary instructions and allot the motor transport for the first echelon of the expedition.

To sum up, let us repeat again, that we must not attempt to follow Army Tables; the Marine Corps mission in peace and war is strictly unique and involves operation of mobile units which must not be hampered with a numerous and heavy equipment.

THE HAITIAN SITUATION

By CAPTAIN JOHN H. CRAIGE, U. S. M. C.

EDITOR'S NOTE: This article was written in February. Since then events have moved swiftly in Haiti. The commission appointed by President Hoover to investigate conditions in Caribbean republic has already taken the testimony of Haitians representing all political factions, and its recommendations will probably be made public in the daily press before this issue of the GAZETTE is in the hands of its readers.

ON THE eve of the presidential election of the current year all eyes turn to the Haitian Republic and interest runs high in the situation which has arisen there and the developments which may be expected. Sporadic political disturbances have occurred in a number of locations, considerable public attention in the United States has been focused on the problems involved and a commission has been appointed by President Hoover to investigate the situation. In view of the facts an analysis of the situation may be of interest to students of the Caribbean policy of the United States which bears so vital a relation to the doctrine and activities of the Marine Corps.

A number of factors enter into the present Haitian situation. These are enumerated below in accordance with their importance in the opinion of the present writer:

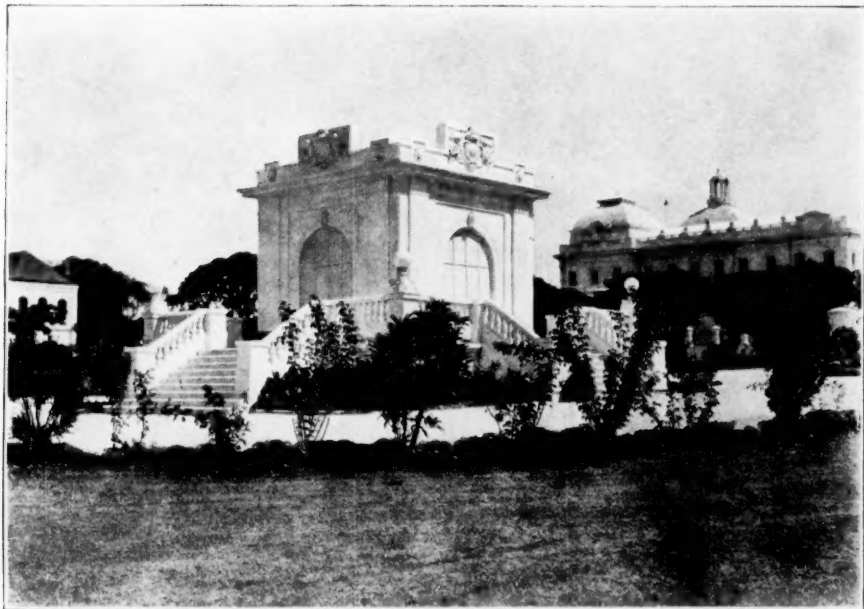
1. The present acute financial depression in the Republic.
2. The administration of President Borno.
3. The presence of the American Occupation.

The financial depression in Haiti constitutes a factor of the greatest political magnitude. Few Americans realize the gravity of the situation or the extent of the catastrophe which has befallen the Haitian national income. Due to the breakdown of the Brazilian coffee trust which controlled the world's markets in that commodity, raw coffee fell in the year 1929 from a high of twenty-four and a fraction cents in January to about fourteen cents in October when the Haitian crop began to ripen. This constituted a decline of nearly fifty per cent in this staple which makes up three-quarters of Haiti's total export.

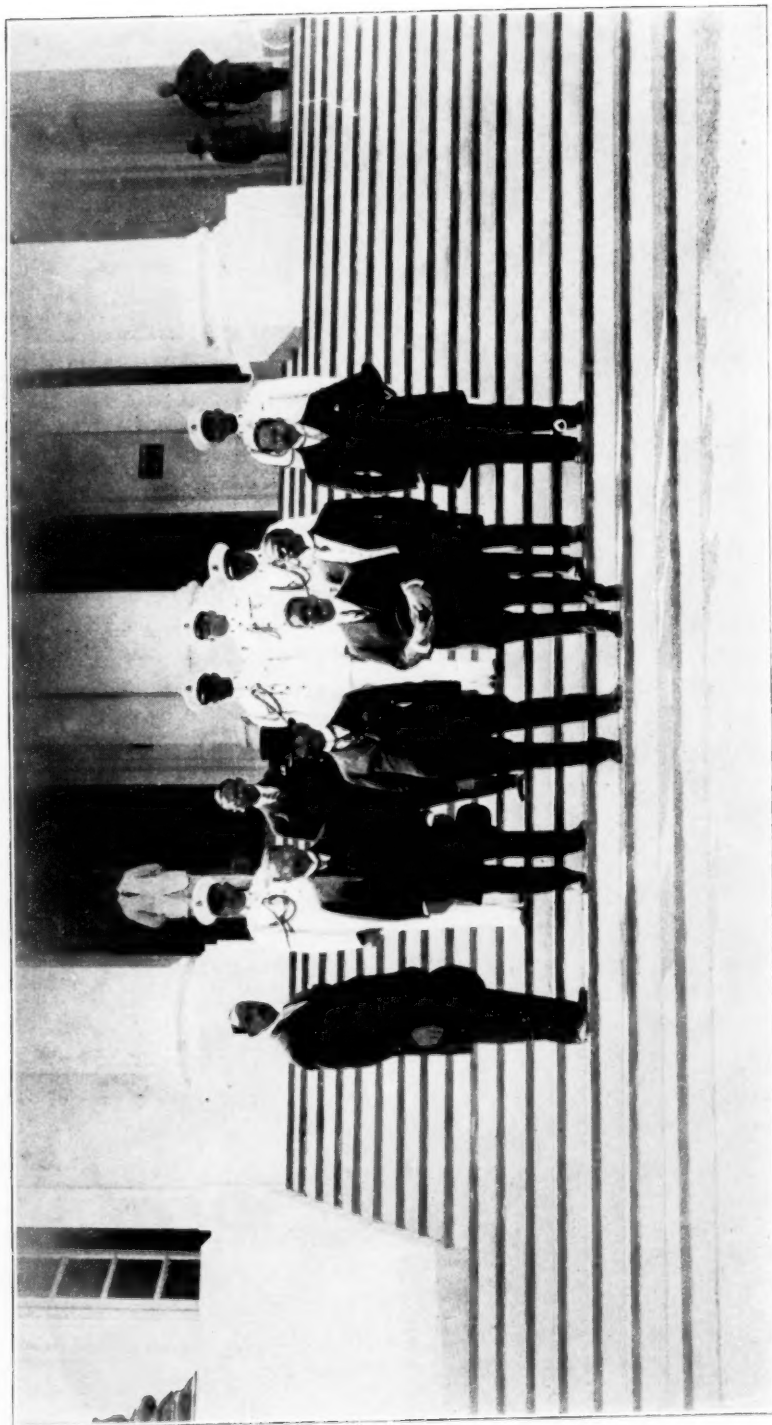
Cotton, another great staple export, was hit almost as hard. Sugar, a third great product, has also been ruinously depressed. As a corollary to the depression in the sugar industry there has been no market for Haitian labor in Cuba. During normal years thousands of Haitian laborers make the voyage to the Oriente provinces of that island during the sugar harvest season and return to Haiti with small fortunes ranging from fifty to a couple of hundred dollars, which is wealth for a Haitian worker. Since the beginning of the sugar depression a couple of years ago thousands of Haitians have been deprived of this source of wealth.



Palace of Justice, Port au Prince, Haiti



*The Tomb of General Dessalines, Who is Regarded by Haitians
as the Founder of Their Nation*



*President Louis Borno of the Republic of Haiti With His Cabinet and Aides.
The President is the Fourth Civilian from the left.*

As a result of these factors, the total income of the Haitian republic has declined rapidly since 1927 and a series of hard years has ensued. A radical cut in the income of almost every family of farmers and laborers is a serious matter and likely to produce discontent and disorder in any man's country. It is the opinion of the writer that the financial depression above described was the acute precipitating cause of the recent Haitian troubles. Among the political classes there are a number of groups made up of those not in office rather loosely bound together into what might be called an opposition party. This opposition is ever on the alert for opportunities to criticise the existing Haitian government and the American occupation. However, this political element loudly voiced its opposition to the existing government at the time of the elections of 1926. Yet there was no popular disorder. Had financial conditions remained normal, there would probably have been a great deal of grumbling in the cafes and clubs, but I do not believe there would have been any symptoms beyond this. Then suddenly the world markets were glutted with the very products upon which Haiti depends for its prosperity. Prices tumbled to new low levels and the average man began to feel the pinch of poverty. The average Haitian, like the average American when in a similar plight, is always ready to blame the Government. And in the background were the politicians of the Opposition eager to fan this smouldering discontent into flame. When the people were receiving good prices for their crops or their labor they gave little heed to politics. The well-fed, prosperous man may growl at political conditions but he is slow to do anything that may hazard his skin or his business prosperity. It is the empty belly that makes a rioter.

The present administration in the Republic of Haiti presents a picture most interesting to the student of laws and the history of government. In final analysis all government rests on the consent of the governed. Difference in governments lies in the extent of the consent and how that consent is secured. In savage tribes the most powerful individual rises to be chief. His government is better for the tribe than no government at all, but its laws are the laws of club and fang. The chief lasts as long as the power of his club is greater than the discontent he causes. After that he loses his leadership and his life with it.

Kings mark man's next step in the evolution of government. The king and his nobles rule by a code of laws of a sort. The king and his dynasty expect to rule forever. Actually many dynasties have lasted for long periods of time. If a people were dissatisfied with a king, they had only one way to effect a change. They would rise against him and overthrow him. Then kings went out of style over a large extent of the earth's surface and republics took their places. More law codes developed, by which rulers were elected by the votes of those governed. These rulers subscribed to the hitherto unheard-of principle that they would step down from office of their own free will and consent at the end of the period for which they were elected. In our own

country and in the great democracies of Europe this process has been going on for so many years that we have been accustomed to taking it for granted.

There is another type of republic, however, in which government does not function in this manner. These republics have excellent constitutions and codes of laws. Theoretically, the franchise of their governing administrations rests on the ballot. In governments of this category, however, no administration ever voluntarily resigns office. Each president holds power until he is compelled to relinquish it.

Prior to the American Occupation, Haiti was an excellent example of this type of republic. Following the American Occupation it became obvious that force could not be used to hold on to the Executive power. It was difficult, however, to establish in the minds of Haitian statesmen the principle of serving a term of office and then stepping aside to make room for a successor without compulsion.

Following the Occupation the United States made a treaty with the Republic of Haiti and a constitution was adopted by that state establishing a structure of rules and conventions of government. Among other things the constitution provided for a Council of State. This Council of State did not originate with the Americans. It made its appearance far back in Haitian history, and it figures in a number of constitutions of the Republic of Haiti dealt with in "The Constitutions of Haiti" of Louis J. Janvier. Under his Imperial Constitution the empire of Dessalines, who ruled Haiti prior to the formation of the Republic, had a Council of State. In its present form this body appeared under President Domingue and has been an important part of Haitian government during a number of periods prior to the American Occupation.

Under the present provisions of the Constitution the Council of State consists of twenty-one members who exercise all the powers of the Senate and Chamber of Deputies when these bodies are not in session. As there has been no Senate or Chamber of Deputies for a number of years the Council of State has exercised all legislative functions. One of the functions of the Haitian legislative chambers is the election of the President. When there are no legislative chambers in session, this function devolves upon the Council of State. The members of the Council of State are appointed by the President. Subject to certain restrictions, the President can remove them and appoint new members at will. Under the circumstances it would seem quite simple for a president of Haiti to secure his re-election indefinitely should he so desire.

Just before the recent disturbances in Haiti there was widespread speculation among the politically minded classes on the possibility of the re-election of President Borno for a third term. The Opposition demanded that the United States should tell Mr. Borno that he must not be re-elected. In view of the fact that it has been the policy of this government to recognize and

endorse in every way the independence of action of the Haitian president and his administration, it might have been difficult to find a legal basis for this action. President Borno is a jurist of international reputation and an authority on constitutional and international law. Every step taken by his government has been carefully weighed and backed by a thesis of the most complete and authoritative character. Had Mr. Borno contended that he had a right to another term and had the Haitian legal authorities interpreted the law in his favor, it might have proved difficult for the United States Government to do anything but accept the decision of these authorities. However, the recently reported decision of Mr. Borno not to stand for re-election has apparently done away with this problem.

Mr. Borno now faces two political alternatives. He may either throw the weight of his influence in the Council of State to the support of a successor of his own choice, or leave the field open. In the former case, his candidate would probably draw little support from the groups opposed to the present government.

Should Mr. Borno decide on a hands-off policy in regard to the election by the Council of State, a most interesting situation would ensue fraught with all sorts of possibilities. It is probable, however, that some of the stronger members of the present governing group would secure the franchise, any of whom would be viewed by the Opposition politicians in much the same light as if he were personally supported by Mr. Borno.

These are the alternatives of an election by the Council of State. However, there is always the possibility that the election will be taken out of the hands of this body. If the American Commission now investigating the Haitian situation should recommend the immediate popular election of legislators throughout the country the new president would be elected by the Senate and Chamber of Deputies; and the Council of State would be deprived of this function. Naturally it is too early to make any prediction as to the decision of the American Commission. To one accustomed to the conservative action of the United States Government in handling its Caribbean problems, this would seem a more radical step than might reasonably be expected. However, it is within the realm of possibility and would induce a situation charged with boundless potentialities.

It is difficult for an American unversed in the ways of Haiti to understand why there has been no elected legislative body in the country since the early days of the Occupation. Such a governing body as the Haitian Council of State could never exist in our own country. However, Haitian statesmen feel that there are very definite reasons for its existence in Haiti. The test of any parliamentary body, they maintain, is its ability to carry out a program of constructive legislation. It must be able to pass such laws as are necessary to enable the government to do its work. When a legislative body finds itself so divided by factional strife that it cannot even put through the meas-

ures appropriating funds for the necessary expenses of the government, it has failed in its mission. Some other type of body must then take its place or the government itself will become impotent and confusion and anarchy will ensue. Haitian statesmen of many shades of opinion have feared this result and to guard against it have provided in their constitutions for the Council of State, a body designed to take over the duties of the Senate and Chamber of Deputies in the event of such an emergency.

There has never been any necessity for such a body in our own country. Our legislative assemblies have never failed to function. However, in Haiti, shortly after the Occupation, Mr. Dartiguenave, who was then Provisional President, asserted that he could not carry on the government of the Republic against the uncompromising opposition of the Senate and Chamber of Deputies. He dissolved these assemblies and set up the Council of State. From that time on there has been no popularly elected legislative body in Haiti. President Borno has consistently maintained that Haiti is not yet far enough advanced politically for government by elected legislators. The vast majority of the people of Haiti can neither read nor write. Those who favor the continuance of government along the present lines maintain that an electorate of this type cannot be trusted to select representatives who will be competent to carry out an orderly legislative program. Those who oppose this view assert that there are enough intelligent electors in Haiti to set up a representative government that will be able to conduct the affairs of the nation. Up to the present time the United States has left the question for the President of Haiti to answer. Knowing that an elected Senate and Chamber could cripple his government merely by refusing to pass appropriation bills, neither of the two Haitian presidents who have held office in Haiti since the American Occupation has dared to risk this experiment in democracy.

THE CASE OF THE NON-COMMISSIONED OFFICER

By CAPTAIN PRENTICE S. GEER, U. S. M. C.

NAPOLEON has been credited with the saying: "An Army travels on its stomach", and I believe that its corollary comes from the old German army: "An army is as strong as its non-commissioned officers". This article is devoted to the latter adage. It is believed that the non-commissioned officers of the Marine Corps are not getting their just recognition, nor are we drawing out of them the qualities of leadership, and results, which could be obtained if they were intrusted with more responsibility, and made to discharge it properly. It is believed that we are, figuratively speaking, clipping their wings, stunting their initiative, forbidding any aggressiveness, and worst of all, depriving them of acquiring the essential qualities of leadership which are imperative in time of war.

First, if the reader will tarry with me for a short space, I would like to express how, in my opinion, an officer should occupy himself in peace time. This, of course, with the understanding that it will be a mere idea, briefly expressed, as the subject itself could fill volumes. But it seems to me that in peace time the officer should feel free to devote himself to study, and further that all facilities be placed at his disposal toward this end. The ideal would, of course, be for the officer to gradually acquire professional books, and thus build up his own library. This usually is out of the question, as it takes most of his pay to maintain himself, without purchasing high-priced professional books and military biographies. This, of course, would be ideal, but as I say, impossible. It is needless to say that the officer of today should be familiar with his drill, the administration of his organization, and conversant with the problems attending his every-day routine. He should be developing the ability not only to lead men, but also to dominate and supervise them. However, the point which I venture to make is that he should be devoting himself to the study of the lives of past military leaders, delving into the deeper channels and depths of military education, which lead ultimately to the field of battle. He should so study and read that the campaigns and strategies of past masters are firmly imprinted in his mind, and almost of a second nature to him. He should be familiar with the successes and failures of the past, and the strategy and tactics involved. In other words, no matter how awkward a position he might get into with troops in the field, there is always a parallel in past history somewhere, and this gives him a possible guidance for future decision and action.

At the present time the officer is usurping the duties of the non-commissioned officer, which is weakening the non-commissioned officer and rendering him useless when given details involving his proper responsibilities. It is rather an unfortunate state of affairs when with a police detail of twenty men or so, a lieutenant or captain must be detailed to take charge, instead of its logical leader, a corporal or sergeant. There are certain details

to which an officer's supervision is necessary. Details which are carrying on technical work and necessitate technical supervision, may require the leadership of an officer, but when it comes to detailing an officer to supervise police parties, and this involves supervision of cleaning-up details around barracks, outlying areas, loading of ships, which should be supervised by non-commissioned officers, quartermaster sergeants and clerks, then it seems to me that we are setting a dangerous precedent. Unknowingly or thoughtlessly we are depriving our non-commissioned officers of their proper right to exercise their judgment, supervision and authority, and thereby curtailing the chance of developing in them the essential qualities of leadership which a non-commissioned officer should have. Not only must the non-commissioned officer have the ability to command his men, but it seems to me just as imperative that he have the force to dominate them also and compel obedience by sheer personality.

I can hear, in the background, echoes of "The Non-Commissioned Officers of today are not what they were yesterday". I grant that. But in granting it, I believe that they are not what they were because we have failed to instill into them the principles of responsibility, we have either failed to correct their mistakes, so that they would understand, or we have sadly neglected to properly discipline them. As a result I believe that now we have with us a great many non-commissioned officers who are a drag on the rest of the non-commissioned personnel, and it takes nothing short of murder to get them reduced. We have a wonderful wealth of material. Many of our men need only the pressure and reality of responsibility, and a clear conception of the results of failure, to rise to the occasion and become the same type of non-commission officers we had in the past. Others, I admit, are not worthy, and should be eliminated. We have too many fine, stalwart, intelligent men in ranks, who are held down because of this condition. The men, when they see authority as exercised by the non-commissioned officers of the present day, lose their spirit and initiative. Today, it seems that when an enlisted man desires advancement, the main object, the big object, is more pay. No matter what he is doing, it seems that he is content if only he receives more pay. I admit again that this is a very human failing, but after receiving his additional pay and the added responsibility which goes with it, he is content to remain mentally a private. In other words, the fact that he receives more pay than do the others under him, and bears chevrons on his arm does not add to his sense of developing authority. He fails to realize that he is now in a position to give certain instructions and orders, and have them carried out. Always it takes an officer to do these things. Always it takes an officer to administer a reprimand. Many times, if a corporal or sergeant dares to discipline or correct an enlisted man, he is either laughed at or told to go to hell; and if he attempts to really enforce his authority, when defied, he will find himself up for office hours the next morning, with a report against him for taking forcible means to compel obedience. Such action, in

my estimation, is the reason for the non-commissioned officer . . . to compel where the commissioned officer, by law, cannot. We are knocking out the very props upon which the military system is built, which, carried to its ultimate end, is that instructions and orders, issued by the proper authority, no matter by whom transmitted, must, and shall, be carried out.

But now to go back to office hours, when the case has been heard before the Commanding Officer, it may develop that the non-commissioned officer did exercise force in compelling obedience to an order by a superior. Invariably, the offender is told that he cannot do this, that he must take other means to enforce his authority. Just what other means can he take? Just what can he do? The non-commissioned officer has received his instructions; the man, perhaps, refuses to carry them out, or perhaps he ridicules the non-commissioned officer who is issuing these instructions, thereby, in spirit, ridiculing the officer who issued the original orders. If the N. C. O. does not use force, the duty is not discharged, and sometimes it means the loss of his stripes because he was tied down and could not properly exercise his authority. The result is, that we now have an otherwise good non-commissioned officer ruined. He loses all pride in his advancement—and, as for the stripes on his arm, they mean nothing whatsoever. The Government has seen fit to make him a non-commissioned officer, and he has sworn to carry out all orders from his superiors, but in the carrying out of these orders his hands are tied if some man refuses to obey. I believe that I may venture the opinion that the human race is composed of as many different mentalities as there are numbers in the race. Some people can be reasoned with, they understand and carry out what they are told, others must be cajoled, others must be threatened. The Marine Corps, we must admit, has all kinds, and each must be handled according to his character. It is not the duty of the officer to use strong language, or physical means. We have the non-commissioned officer who can and will carry out this particular duty of enforcing orders direct to the men. He is the brawn, punch and kick of the military system, whereas the officer is the guide and the directing intelligence.

It is the history of our Nation, that after every war, there has been a let-down in the discipline, morale and spirit of the military. There is no question but what the aftermath of war is demoralizing, because the service has lost many of its fine members who have been disciplined and trained for years, and the absence of these members creates a very different atmosphere. We have lost men who were imbued with the spirit of service, loyalty and devotion, and love of their profession. But through patient effort we can duplicate these men. But it will be up to the officers to properly guide, encourage and discipline, and also select the right material before the non-commissioned officers of today will be what they were yesterday. It is to the non-commissioned officer that we look for the foundation stones upon which we will build our fortress. His training is imperative, and we should see to it that we have stones of the proper dimensions, that they are set properly and that

we have no loose stones in the foundation. To the N. C. O. we assign the important little details. We depend upon him for an unlimited amount of loyalty and devotion. He is the pulse and heart of the strength we would have, and unless we give him more responsibility, select him more carefully, train him more diligently, and develop the quality of leadership more earnestly, we will not have properly discharged our duty.

How are we going to remedy this state of affairs? Some may think that it is going to be difficult and may take years. I admit the former, but not the latter. We can do it, and by the simple procedure of beginning at the fundamentals and making the corporals responsible for eight men, the sergeants for sixteen and twenty, and so on. This is not confined to the corporal's or sergeant's, particular squad or section, it applies to any number of men over whom they are put in charge. I am filled with misgivings for the future of a sergeant or corporal who has always had the lieutenant or captain standing by telling him what to do, and watching him while he does it. Put that same non-commissioned officer on the actual field of battle, give him a patrol with a mission to discharge, and who can predict the result? No officer to take the responsibility, no officer to tell him what to do, how to do it, and to watch while he does it. No, he is there by himself, for the first time, given a terrible responsibility, intrusted with the lives of the men under him, and perhaps the lives of thousands behind him, and with a mission to carry out. Can he do it? Has he been trained to do it? Has he been trained in the leadership of men, possessing initiative, aggressiveness, and a full sense of responsibility? I think we have not been fair to him, and that we have put him in a position where he is helpless, and figuratively unarmed. We are sending that non-commissioned officer into the face of the enemy with his hands tied and helpless, no training as to resource and ingenuity, no training as to leadership, no training as to responsibility, and no training as to that aggressiveness which would otherwise push him over to success. It is something to think about. Perhaps I am painting a picture which is too dark. I hope so, but at the same time, I cannot help but believe that there is more than a grain of truth in what I say.

I have watched non-commissioned officers on the drill field and have seen their awkwardness, lack of force, and failure to jump to the front with an impellingness in their voices, to which the men instinctively respond. They are uncertain, their voices do not express command . . . the will to be obeyed. Theirs must be a dynamic quality which is almost electric in its unconscious reaction to what is wanted. Personality, perhaps, is what they lack, and what they need to have developed, but this can only be developed by practice. There is a tendency to have the officer as an instructor. It is my contention that the non-commissioned officer is the instructor, not the officer. The officer is the supervisor, he guides and directs, and corrects, when the non-commissioned officer makes a mistake. After the correction of the mistake, the non-commissioned officer should be allowed to continue

on as before with the instruction. But we are ordering the officer on the field, and he is the instructor; the non-commissioned officer merely follows as a file-closer, and once in a while you will hear his voice correcting the details. He has not had the opportunity to get out and do the thing himself, so that he may be confident and sure of himself. If given the chance, non-commissioned officers can and will handle the men, but we are denying them that chance. It is said that Napoleon, after his defeat at Waterloo, remarked that it was because he had to make corporals with less than twelve years' service, and that they were not able to lead their units. I realize that we have not the same type of professional soldier they had in those days, but the principle remains the same. It takes time to properly season men who will make good non-commissioned officers, and we should go very slowly and make sure that the material we do make is of a calibre which will prove through time and stand up under stress. It is an interesting thing to take a man and, through patient guidance and instruction and putting him on his own, show him where his faults are, correct them, and then see the interest and increased efficiency which develops.

Some time ago I had the opportunity to so train a company and it was worth while when the results began to come in. Quite frequently instead of taking them out myself on combat exercises, I would turn over the organization to the senior lieutenant, explain the problem to the company, tell them approximately where they might find the enemy, and then before the company departed, leave for the area myself, with three or four non-commissioned officers, to watch their approach. As they approached, I would pick out the faults and mistakes and show the men who were with me how easy it would be to utterly wipe out the company because of the lack of leadership in the squads and sections. The formation was correct, according to the book, but the manner in which the squads were led, and the quality of leadership displayed by the leaders was pitiful. I could recognize certain non-commissioned officers' voices, yelling and shouting at their men. Troops were led across open fields when cover was available. Prior to the final assault, the squad-leaders would insist on their men running ten or twenty yards and then dropping, preserving a perfect alignment when thrown on the ground, disregarding what cover there might be just ahead or just behind. These were some of the most glaring faults. After they had gained their objective, a critique would be held, and I would call upon the men who had been with me to explain to the company just how they looked. This was done after each similar demonstration, and gradually they began to profit by the various lessons which they had been given. It was not long until they became so good that it was difficult for me to find them even with glasses, until they burst out of thickets, from behind trees and bushes, out of holes and trenches, in the final assault. The point which I wish to make is that they had never been able to exercise this ability before, nor had they had these things pointed out and actually demonstrated to their own satisfaction. They did not know how,

nor were they capable until they actually did it themselves, and then were corrected and shown the proper way, then did it again, were corrected again, and so on, until they finally understood the part they were to play. This same principle and method can be applied to everyday duty and work; let them do it themselves, and then if wrong, correct them, explain to them wherein they have been wrong, correct them again, and if necessary discipline them until finally they will begin to grasp just what their duties as non-commissioned officers are. This will take time, labor and patience on the part of the officers, and the older and senior non-commissioned officers.

The discipline which we exact from the men during peace times, we may very nearly expect during wartime under the stress and excitement of battle. If we have been lax in reprimanding men in peace times, and have allowed them to do things not their best, then we may expect in war to have terrible losses, due to this same thing. We should make this discipline of ours unconscious and automatic, in peacetime. Then in the stress of battle, confusion and darkness, we will have the same thing—obedience, absolute carrying-out of instructions, leadership, initiative, and aggressive action, all unconscious and automatic. And with our non-commissioned officers so trained and indoctrinated with these qualities, we need have no fear, whether we are in China, Central America, or abroad in some other larger field of activity.

The commissioned personnel hear and study a great deal of the chain of command, but when it is all said and done, just how many exercise it in the daily routine of duty? How many company commanders and battalion commanders, carrying it right on up? Instead of calling the corporal in, and disciplining him also, when a man's equipment is found to be not properly taken care of, his uniform not what it should be, his bunk improperly made up, and his sea-bag a mess, many officers jump on the man himself and never say a word to the man's corporal. The man is not to blame entirely, the non-commissioned officer has failed to properly supervise that man. He has failed to show the proper initiative. He has failed to take the necessary time to check the squad. What can you expect of the man if the non-commissioned officer does not supervise him—standing over him if necessary, and either seeing that he does it, or making him do it? Could a company commander do the same with his company and have an organization of which he could be proud? I think not. The company commander must properly supervise his lieutenants, the lieutenants the platoon sergeants, platoon sergeants the section sergeants, and so on down to the last unit. Yet we allow the corporals and possibly the sergeants to neglect this supervision, while we sit calmly by and reprimand the private, and the net result is, that the higher non-commissioned officers and the officers have to do the corporal's duty and the sergeant's duty, if they are to escape reprimand.

Again, we are allowing the non-commissioned officer to become inefficient, careless in his duty, by having no sense of responsibility impressed upon him.

If an organization is not in proper condition, has no discipline, and does not appear well, the officer commanding naturally bears the brunt of reprimand. However, if he informs his senior that he has endeavored to properly instruct his non-commissioned officers, and that this is the result, then many times he is ordered to exercise personal supervision. Why have the non-commissioned officers, if the company commander is to perform the duty personally? On the other hand, why not bear with him, and if a non-commissioned officer is not doing his duty, discipline him, or reduce him, and get someone who will? We can have a real chain of command, by helping the platoon leaders and company commanders in their endeavor to have this responsibility discharged properly, and insisting that the non-commissioned officers perform their duty. Why compel the commissioned officer to be personally responsible for each and every act of every man in his organization, when the service pays others to do that particular duty? By having the officers step in and personally see to it that Private Jones and Private Smith get their hair cut, or make up their bunks, or rearrange their sea-bags, or roll their heavy marching order correctly, we are taking away from the non-commissioned officer the last vestige of authority, and in addition to that, making that non-commissioned officer appear useless and unnecessary. The net result is that when a non-commissioned officer endeavors to exercise his authority, his effort goes to waste, and the officer has to step in; and if he doesn't say "Jones, get your hair cut," the chances are six out of ten that Jones will not have his hair cut.

To develop the sense of responsibility it will be necessary to leave the non-commissioned officer alone to a certain extent, so that he will be able to acquire and exercise leadership. The first thing that is absolutely necessary, is to explain to the men that the non-commissioned officers over them are to be obeyed, and to make this so clear to them that there can be no mistake. The non-commissioned officers and the men should then be brought together, and in the presence of the non-commissioned officers the remarks already made to the men should be repeated. Then cast them afloat, figuratively speaking, and when cases of insubordination arise, back the non-commissioned officer, and if the non-commissioned officer has been wrong, get him off to one side and proceed to explain wherein he erred and show him the proper manner of exercising his authority by explanation, illustration, going into the matter very carefully, so that the many little important details of duty and discipline will be clear to him. Then, if reports of his mishandling of men or improper use of authority come in again, the man undoubtedly is not fit to be a non-commissioned officer, and should be reduced. A great deal of judgment and confidence must be reposed in the hands of the company officer, and when he recommends that certain men are not worthy to be non-commissioned officers they should be reduced. The manner of handling men, the different way in which work may be pulled out of men, the reporting of details for duty, the obtaining of instructions, and the thorough under-

standing of the instructions before starting out, all these little things, small though they may be individually, nevertheless may either work for success or failure, unless carried out by the non-commissioned officer, and understood by him. Rarely are two details, with regard to their minor ramifications, the same, and the man in charge must be ready for something new each time and be able to handle the situation. This will take time and patience on the part of the officers who are responsible, but it can be done if time is taken to instruct on every occasion the various non-commissioned officers who are going to be in charge. In all probability most of us will never be able to complete the education along these lines of most of our non-commissioned officers, but we will have instructed them in the primary stages, and when they go on to another organization, just that much less work will have to be done by the next company commander. It will not be long before they will be getting the unconscious habit of carrying out their instructions, and the result then will be well worth while. It is extremely interesting to take a group of young non-commissioned officers, and by working with them and explaining carefully, watch them gradually move up out of the ranks of the irresponsible, and begin to develop the spirit of responsibility. One can see their interest quicken and their pride grow when they know what they are doing, and are actually exercising authority. The pride which we are able to instill into them will carry them on to anything. Any workman is proud of work well done, any artist is naturally proud of a painting or drawing which brings words of praise and admiration, and any engineer is also proud of a bridge or tunnel well turned out, and obstacles surmounted. Our profession is no different. We must take men and slowly but surely show them that without pride, to a reasonable degree naturally, a person has nothing or can do nothing in this world. No matter how small a place we may occupy, if we have a pride in doing small things well, no man can touch us, or belittle us. The same is true of our non-commissioned officers and men; we must teach them how great they may become, by doing these small things well, thereby laying the foundation for doing big things well, thus acquiring pride and bearing which fairly radiates efficiency, leadership and energy.

It will take but little time for the company commander to have the first sergeant occasionally bring a non-commissioned officer into the office, and then talk to him individually, explaining various phases of discipline and conduct in the exercise of authority. To bring the company together once in a while and talk to them on different subjects is another method of interesting the men. If this is done systematically, and with a set purpose in mind, it is astonishing how morale picks up, and how interest in duty is increased. All of this goes hand in hand with the instruction of the non-commissioned officers, and increases their knowledge and efficiency. It also gives the men a little different viewpoint on the service. To instruct them merely in the drill manual is not enough. Their education should be rounded out, and the commissioned officer with his knowledge and education, can lend an

immeasurable amount of assistance toward accomplishing this. Give them little bits of history, illustrating certain military principles. Show them how the principles laid down by great military leaders of the past can be applied to everyday conditions.

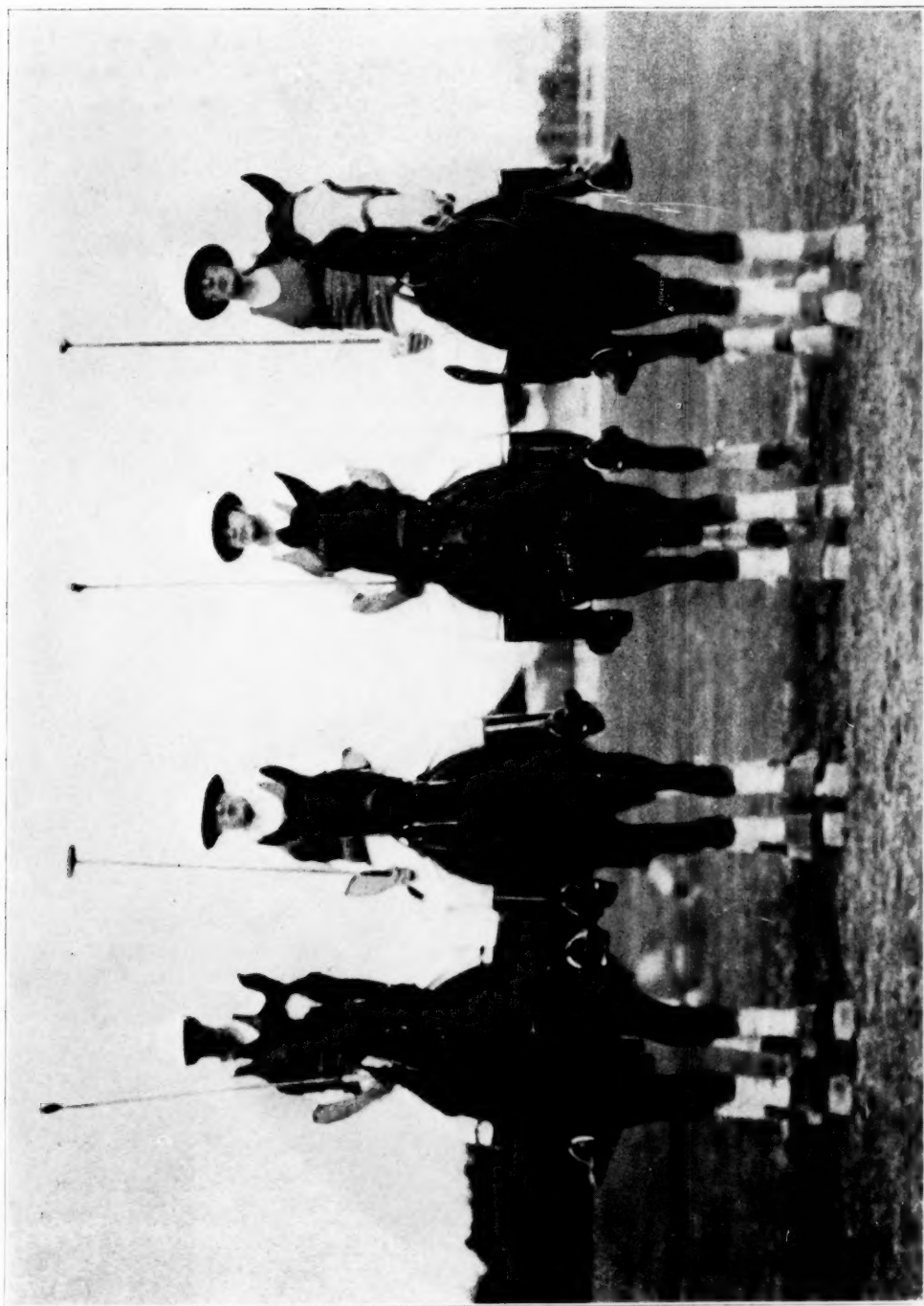
Another way in which we are slighting the non-commissioned officer is the method by which a great many are examined. The writer finds it varies widely according to the post or station. It is believed that most men are not examined properly. How often have we heard the expression, "How many non-commissioned officers can we make?" One rarely hears the question, "How many men have we that will make non-commissioned officers?" All posts and units have certain quotas of non-commissioned officers, and when there are vacancies, the all-consuming desire seems to be to *fill these* vacancies, when they exist, disregarding, in some cases, the quality of the material available. Many times vacancies are filled without examination, others are filled after a most superficial examination, and rarely are they filled after an examination which requires the candidates to put down on paper what they know.

A short time ago, I had the experience of being on two different boards for the promotion of privates first class to corporal. The first board held a brief examination, and passed all the candidates; the second board insisted upon a written examination together with the necessary oral examination, and graded the papers accordingly. As a result of the second board, out of fourteen men, some five passed the examination and were promoted. This aroused a great deal of comment and interest, and the officers of the various organizations began to receive requests from their men to use their training regulations. They were beginning to realize the value of study. Other examinations were held similar to the second, and the type of men who passed was surprisingly superior and made far better non-commissioned officers. Which was the better method and which brought out the man that was wanted? Before I go any further, I admit that the man who can pass a written examination does not by any means always make a better non-commissioned officer than the man who cannot. But with certain qualifications, and adding other requisites, I believe that the man who can sit down and put into words what he knows is better than the man who cannot. Then add to this: experience, length of service, general deportment and appearance, his known ability to handle men, and I think we have the N. C. O. we want. By slighting the proper examination of these men, we are allowing to pass into the ranks of the non-commissioned officers men who are not qualified and men who never will make non-commissioned officers. We should insist that this examination be made rigid, and then add to it, experience, length of service, etc.

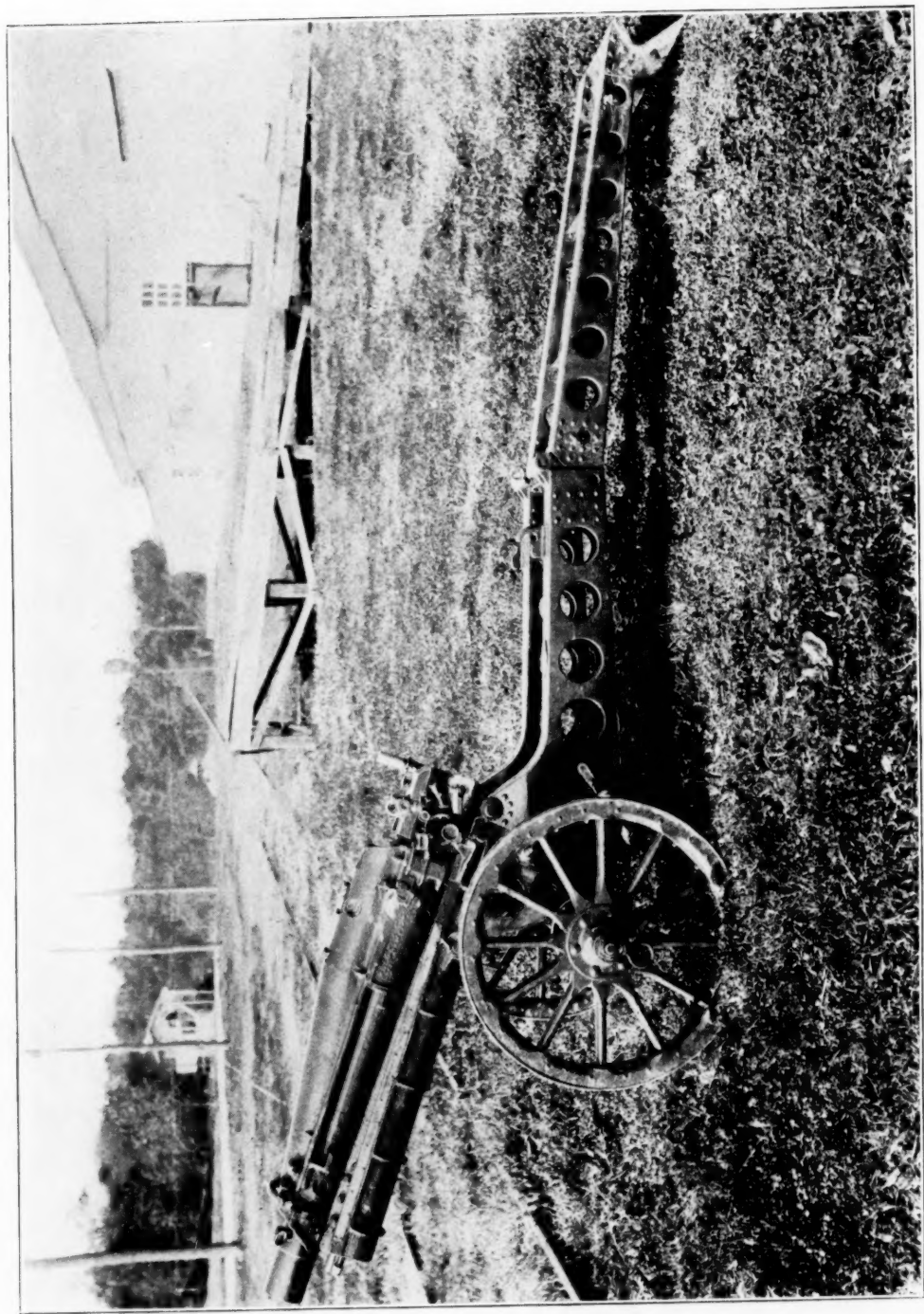
Many times the only reasons given for promoting a man are that he has been in the service for a certain number of months, or years, that he has been

performing this duty or that duty, and *rates the promotion*. No man rates his promotion unless he is qualified to take troops out on the field and handle them. I am now speaking of the line. I think that we should discourage the idea that because certain men have been performing certain duty, for a certain number of months, or that certain men have been in the service for a certain number of months, that this entitles them to promotion; rather it should be impressed upon them that until they have been seasoned, by a number of years, at least, in the service, they stand no chance for promotion. Give those stripes on the man's arm a glamour, make them something to strive for. Make every man realize that until he has put in at least one cruise, he is still a youngster, so far as the service is concerned.

In conclusion I would like to state that nothing in this article is directed at those efficient non-commissioned officers whom we undoubtedly have. We all know them and we all encounter them, but this article has been directed toward certain tendencies which seem to be creeping in, and will eventually weaken even the best of our N. C. O.'s.



*The Team of the Marine Corps Riding and Polo Association. Captain Brocken, No. 1;
Lieutenant Good, No. 2; Major del Valle, No. 3; Major Potts, No. 4.*



The New 75-mm Pack Howitzer

THE NEW 75-MM PACK HOWITZER

By MAJOR H. C. PIERCE, U. S. M. C.

THE ACCOMPANYING PHOTOGRAPH shows the new 75-mm pack howitzer for which a procurement plan is in effect whereby this type of 75-mm weapon will eventually replace the 75-mm gun in Marine Corps light artillery organizations.

This weapon is considered to be far superior to the 75-mm gun for Marine Corps use. For comparison the characteristics of 75-mm gun Model 1897 (French) and the 75-mm Howitzer Model 1923-E2 Pack are tabulated:

75-mm Pack Howitzer, Model 1923-E

Caliber	75-mm
Length in Calibers	17.6
Number made	4
Rifling, twist uniform	1 turn in 20
Maximum elevation	45°
Minimum elevation	5°
Traverse	5°
Muzzle velocity, maximum	1250 f.s.
Weight of shell	15 lbs.
Maximum range	9,200 yds.
Maximum effective range	8,500 yds.
Number of pack loads	6
Weight of maximum load	225 lbs.
Weight in firing position	1305 lbs.
Independent line of sight	No
Traversing hand wheel	Left
Elevating hand wheel	Right and Left
Suitable for direct laying	Yes
Suitable for draft	Yes
Suitable for hauling by hand	Yes

The ammunition is really of the semi-fixed type. That is the shell is not crimped to the cartridge case, but can easily be removed and inserted. The propelling charge consists of five component parts, any number of which, up to four, can be removed in order to vary the range. The rapidity of fire is about the same as that of the 75-mm field piece. The trail is easily moved to provide greater traverse. The gun is especially rugged and sturdy. In fact it appears to be an all purpose gun far superior to the field gun for our use. It is now being tested in Texas and you can get the results of these tests from the Pack Artillery Board. The whole trend of the Field Artillery appears to be toward a howitzer to replace the field gun.

It will be noted that the fire power of the howitzer is equal to if not greater than the 75-mm gun.

The light weight and small size of the howitzer peculiarly adapt it to the needs of the Marine Corps in landing operations and to the usual Marine Corps peace time operations in unsettled mountainous countries, where roads if any are poor and mountain trails the usual means of communication.

This howitzer has a curved trajectory which enables it to fire from working positions which can not be reached by the fire of 75-mm guns, or other flat trajectory guns, and makes it particularly suitable for employment in mountainous country where a great amount of dead space exists due to the nature of the terrain.

This weapon may be transported by pack mules in six loads, may be hauled in draft and two such weapons may be transported if desired in one truck. It occupies comparatively little storage space on board ship and may be transported with facility from ship to shore in small boats. It can be easily man handled on shore and quickly assembled. The maximum weight of load when packed is two hundred and twenty-five pounds.

Requests for the purchase of this weapon in sufficient numbers to replace in large part the 75-mm guns are being included in Marine Corps ordnance requirements. It will however probably be a considerable period of time before sufficient howitzers are procured to entirely replace the 75-mm guns now on hand in the Marine Corps.

THE MARINE CORPS RIDING AND POLO ASSOCIATION

By CAPTAIN CAMPBELL H. BROWN, U. S. M. C.

SATURDAY, September 28th, 1929, besides being the anniversary of sundry and other more or less notable occasions, was a red-letter days in Marine Corps athletics. On that day a polo team composed entirely of Marine officers was organized, and played its first game, it being as well the first time in the history of the Corps that such a team has been organized and has played within the continental limits of the United States. As is generally known, polo has been played for some years by Marines serving in Haiti, Peking and on other foreign stations, and there have been isolated cases where individuals have played as members of organized clubs in the States; but up to now no concerted effort to organize a polo club by and for the Marines has ever been made in the States.

The game previously referred to was the result of two things; the formation of the Marine Corps Riding and Polo association and the hospitality of the members of the Fort Humphreys Polo Club.

In July, 1929, a number of officers stationed at Quantico, realizing the great strides which polo has taken in the United States in the past years, and the value of horsemanship, primarily of polo, as a means of keeping in trim, both mentally and physically, applied to The Commanding General for permission to organize the Marine Corps Riding and Polo Association. Permission was instantly granted and the members of the new association set about devising ways and means incident to its further development. Letters were sent to those officers who, it was thought, might be interested in furthering the aims of such an organization, and the results of this circularization were, to say the least, gratifying. However, a polo team cannot be built up in a day. It takes time to accumulate equipment, acquire and train ponies and organize and train a team. Most of the difficulties were in part obviated by the fact that the officers originally composing the Polo Association were all veterans of the playing fields of China and Haiti, and practically all had their own equipment.

There remained the matter of mounts. A good polo pony is a perfectly coordinated, highly-schooled machine, whose education is never complete, but who can be put into playing shape inside of from eight months to a year. Naturally there were none of these available at Quantico. A few officers had their pony mounts, which were cheerfully loaned, and there were present a few suitable public animals. On these the members of the squad were able to secure a pitifully small amount of stick-and-ball work, and slow team practice.

Some time after the formation of the Riding and Polo Association, one of its members was at Fort Humphreys on duty. Happening to mention the difficulty with which the Association was confronted, he was surprised and

delighted to receive a most cordial invitation from the manager of the Fort Humphreys club to play a series of games at Fort Humphreys, mounts and equipment to be furnished by Fort Humphreys. Accordingly, a practice game was arranged for the following Saturday. To say that this game was a complete success is putting it mildly. Six chukkers, instead of the customary eight, were played, in view of the obvious shortage of mounts and the fact that the Marine Corps players were badly in need of practice.

The initial lineup for the Marines was:

- No. 1 Capt. Campbell H. Brown
- No. 2. Capt. Richard H. Jeschke
- No. 3 Major Pedro A. Del Valle
- No. 4 Major John Potts

Substitutions were frequent, in order to give all hands practice in match play. The following officers substituted, and played in at least two chukkers each: Capt. Lloyd L. Leech, Capt. Lemuel C. Shepherd, Capt. Jacob M. Pearce, Jr., Lieut. Hayne D. Boyden, and Lieut. Jas. P. S. Devereux.

Although this was purely a practice game, and no official score was kept, it is gratifying to note that the score at the end of the game stood 3 to 2 in favor of the Marines, especially so in view of their lack of practice, both individually and in regard to team play.

Following the initial game at Fort Humphreys, two more games were played with that club under the same circumstances, one of which was lost and the last won by the Marine team, giving the Marines a total of two games won out of a series of three in the practice series.

Again, thru the hospitality of the officers on duty at the Air Corps Tactical School at Langley Field a game was played at that station early in November, which was won by the Langley Field team.

Too much cannot be said here in appreciation of the spontaneous hospitality of the officers composing the Fort Humphreys Polo Club. Not only did they lend their mounts, but it was apparent to all who used them that they had given the Marines the better half of these. In many other ways, too, they gave evidence of a strong desire to assist, in whatever way they could, in furthering our aims along this line.

Also, those members of the squad who made the trip to Langley Field were unanimous in their appreciation of the hospitality accorded them and the good sportsmanship exhibited by their hosts on this occasion.

Tentative arrangements were made for a game with the Coast Artillery School team at Fort Monroe, but these had to be abandoned due to the approach of winter, and the season brought to a close.

With regard to plans for the future, efforts are now being made to construct a playing field, practice cage and other appurtenances, without expense

to the government, at Quantico. The matter of acquiring and training a string of mounts is also being given attention. The circulars previously mentioned have been sent to those who might be interested, but the Association feels that any who are in any way interested in this, a worthy venture, and one with untold possibilities for the Marine Corps, will so inform the secretary, Major Del Valle, at Quantico.

Incidentally, the constitution adopted and officers elected to manage the affairs of the Association are both temporary expedients. These measures were taken purely to enable the Association to get a start, and, in the near future it is expected to hold a regular election of officers and to adopt a permanent constitution by popular vote of the members.

The officers at present serving are:

Honorary President: Major General Butler

Board of Governors: Major John Potts

Captain Campbell H. Brown

Captain Richard H. Jeschke

Secretary Treasurer: Major P. A. Del Valle

An enlisted men's team has been organized. This is not without precedent, inasmuch as several clubs from the mounted services of the Army have teams composed either wholly or partly of enlisted men. Certainly it is of value in teaching enlisted men horsemanship, an important accomplishment in view of the widespread employment of mounted infantry and pack transport during the Nicaraguan occupation, and previous expeditions.

As opportunity permits it is hoped to organize several teams, both officers' and enlisted men's, from the various organizations at Quantico and to hold each spring an inter-post tournament to determine the team best fitted to represent the Marine Corps in games. It is also hoped to gain admission into the United States Polo Association, in order that the Marine Corps team may be eligible to compete in contests sponsored by that organization. Such a plan, if carried to a successful completion, obviously will result in great benefit to the Marine Corps at large.

It may be argued that, as a sport, polo is not desirable for the Marine Corps, by reason of its great expense. Naturally, any sport can be **expensive** if it is made so by useless and careless spending of money, but the writer has found this objection to be greatly exaggerated, provided care and judgment are exercised in the matter of expenditures. A recent survey along these lines, conducted at the University of Arizona, which, by the way, has one of the best college teams in the country, has shown that the annual cost to individual playing members is something less than one hundred dollars. Let the officer who plays golf or tennis calculate carefully what it costs him per year to follow his hobby and he will see that it closely approaches this figure. Twelve dollars and fifty cents a month is hardly what could be called extrava-

gant expenditure, considering the returns in good health, comradeship and pleasure.

There may be advanced the objection that only four men can play on a side. Quite true, but before a team can be picked, a host of candidates must be tried out. Then, too, although only four can play ten thousand can watch, and, outside of perhaps ice hockey, there is no game more fascinating as a spectacle, with its kaleidoscopic changes of formation, periods of fast and seemingly reckless riding and clean, crisp hitting.

Some opposition may be encountered from misguided humanitarians on the grounds of cruelty to the ponies. The writer has knowledge of such an incident in Haiti several years ago. Added to this may be opposition by otherwise well-informed people on the ground that polo shortens the life of the horse and impairs his usefulness, especially with respect to other duties which the horse in the Military Service may be called upon to perform.

There is an overwhelming mass of evidence in refutation of these two objections. As to the first, let the onlooker at any polo game take note of the apparent enjoyment with which the well-schooled pony puts his nose down and scurries for the ball or puts his weight against his opponent. To this may be added the yarn, open to question, of the pony in the Philippines who was wont to give utterance to a triumphant whinny each time his rider shot a goal. In all seriousness, however, it must be pointed out that this objection is raised by well-meaning people, whose knowledge of horsemanship is limited, and to whom the handling of a pony in fast polo by a skilled rider, as all good players must be, appears to be a performance in which cruelty is the dominating factor.

As to the second objection the reader is commended to statements recently made by the Chief of Cavalry, and other officers of the mounted branches of the Army, to the general effect that, for the development of hardiness, strength and intelligence in a horse there is no school so efficient as polo.

The writer, during a recent tour of duty in China, purchased two ponies for polo, one of whom was 13 years old, the other 15, both of whom had played polo for some years prior to their purchase. Both are still playing though now 17 and 19 years old, and have outlived a number of ponies, who, as members of the Mounted Detachment at the American Legation Guard in Peiping, were used for purely military purposes.

There are numerous instances of this sort in the state, showing that early death in polo ponies is the exception, rather than the rule. Certainly they will keep in condition much longer with the great care, and regular, too strenuous exercise of polo, than with the long periods of enforced idleness and intermittent work, as is to be expected in most cases.

It may be of interest here to call attention to an article appearing in a recent issue of POLO, published in New York City. This article is entitled

"Polo Reminiscences of a Sailor", and written by Admiral Mark Kerr, of the British Navy. The article begins "The starting at this time of a Royal Naval Polo Association under the presidency of Admiral of the Fleet Earl Beatty, with Admiral Sir Roger Keyes as vice-president, gives me hope that some day the British Navy will regain its old place in the polo world."

Continuing, the article touches on many amusing and interesting incidents connected with the pursuit of the game some thirty years ago, by "men accustomed to ropes, oars" and the other implements of a sailor's trade. The following passage is of particular interest: "In 1890 or 1891 the German cruiser "Irene", commanded by Prince Henry of Prussia, arrived at Malta.

. . . Prince Henry asked me to teach him polo because, he said, they wanted more games in Germany in order to produce the spirit of sportsmanship and comradeship. It was not only the game as such that he wanted to introduce into Germany, but that the virtues which came from playing should be spread amongst his officers and men. He rightfully remarked that it was this spirit which then made the difference between the discipline of the German and British navies. He learnt the game fairly quickly, and when he sailed he assured me that he was going to make a great effort to introduce polo amongst the officers of his service."

In summing up, Admiral Kerr says: "Polo is one of the greatest of all games if played properly. It teaches discipline, team-work, and the consequent unselfishness that is an education in every form of life." Which, by way of comment, is comprehensive as well as succinct.

This excellent article is mentioned to show that, contrary to some impressions, polo is not a new sport even to certain people skilled in the ways of the sea. It is also hoped that it will serve to cast into outer darkness forever that bewhiskered and legendary character, mentioned with derision whenever a marine puts foot in a stirrup—Captain Jinks.

So much for polo. As will be seen from the title of the Association, it is not formed for the furthering of polo alone. To quote from the constitution, "it is the avowed policy of the Association to spread knowledge of and increase interest in horses, their care and their management, in order that good, sound, healthy, well trained and well groomed animals may always be available for both duty and sport". To this end, members of the Associations stationed at Quantico have, voluntarily, and in their spare time, effected such repairs and additions to the trails and bridle paths on the reservation as would put them in serviceable condition, and in addition are acting as instructors to riding classes of ladies and children, members of officers' families, which have been formed and have a large attendance and enthusiastic support. Naturally, the instruction of officers is a part of their military education, but those members of the Association who are qualified to act as such have undertaken to give additional instruction, in the case of a small number of officers

who have requested the formation of a class which meets during their necessarily limited hours of recreation.

Quoting again from its constitution, "The Association will use all legitimate means to improve the remount service of the Marine Corps". This would seem to be self-explanatory. It does not mean, however, as has been suggested, that the Association intends to presume to itself the mission of uplifting and placing on a higher plane the small but important remount service, with its headquarters at Quantico, by indiscriminate and ill-advised meddling. It simply means that the members of the Association propose, tactfully and intelligently to assist the officer or officers in charge in whatever way they may be able, by action and helpful advice, and above all, to create among the personnel of the post a sane and considerate attitude in their treatment of animals, as well as to give the instruction previously referred to when such is requested.

It must be borne in mind that the activities of the Association are not meant to be confined to Quantico. That post was selected, chiefly because it has the largest complement, officers and men, of any in the Marine Corps, having as well a spacious reservation, and the home stables of the remount service. But should the officers of any other post feel able and willing to found a chapter, they are urgently requested to do so.

In this article an attempt has been made to show what can be done and what has been done in the matter of furthering an interest in polo and horsemanship in the Marine Corps. Little can be done without the wholehearted and enthusiastic moral support of the majority of officers of the Corps, and it is for this that the Association earnestly asks.

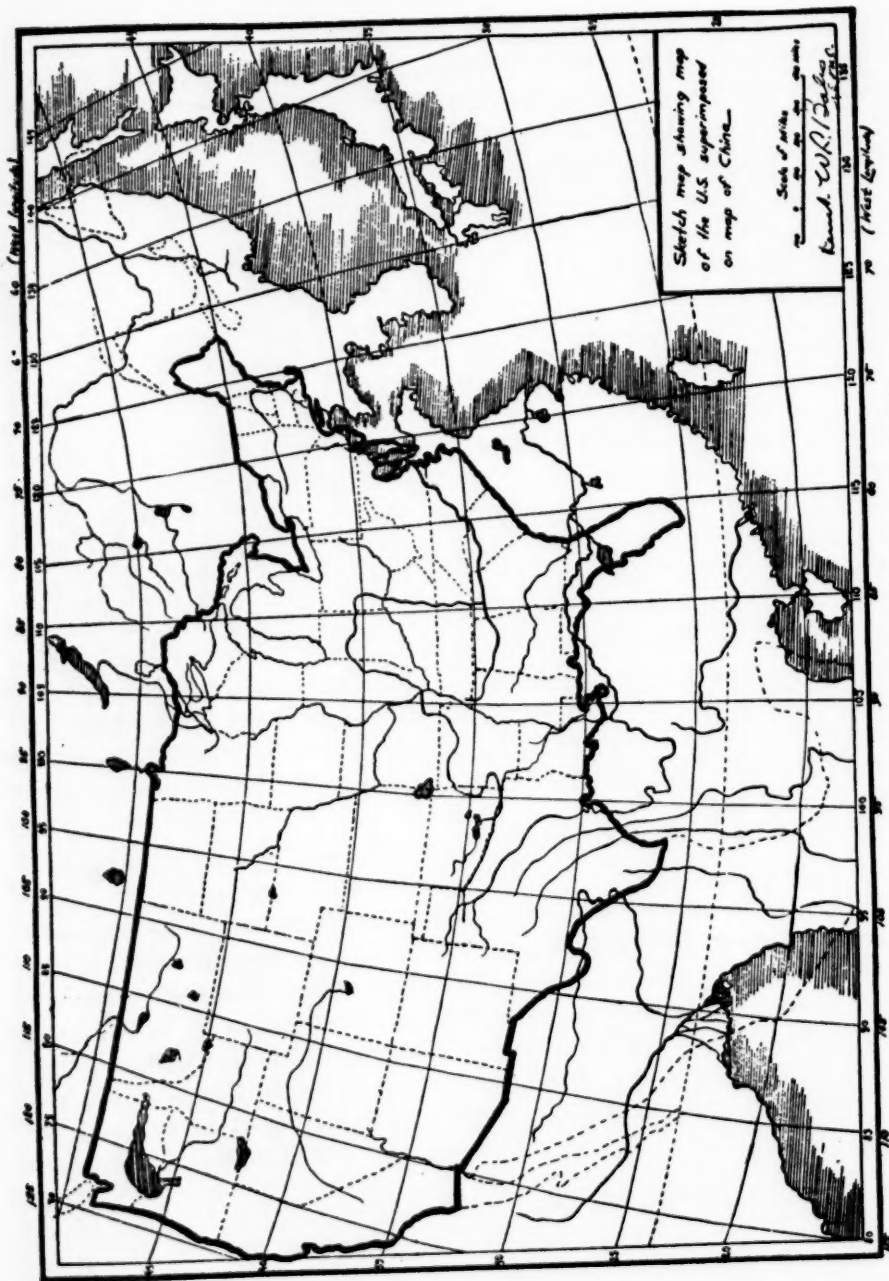
NOTES ON THE GEOGRAPHY OF CHINA

By FIRST LIEUT. W. L. BALES, U. S. M. C.

Part I

THE TERM "China" is not a Chinese expression. They do not have a name for their country sounding anything like our word "China". "China" is probably derived from "Ts'in", the name of a dynasty that ruled over most of the territory now included in China during the latter part of the third century B. C. The name has undergone several modifications, as "Jin", "Chin", "Sina", "China". The Romans referred to the country as "Serica",—Land of Silk. During the Middle Ages it was known in Europe as "Cathay". Among the Chinese themselves the usual name for the country is "Chung Kwo", usually translated as the Middle Kingdom. They have other expressions designating the country, such as "Si Hai",—The Four Seas or, The Universe; "Huo Kwo",—Flowery Land; "Nwi Ti",—Inner Land; "Shih Pa Sheng",—The Eighteen Provinces. Their usual expression for themselves is "Chung Kwo Jen" or Men of the Middle Kingdom. Northern Chinese are sometimes referred to as "Men of Han" and southern Chinese as "Men of Tang", names alluding to two famous dynasties in the annals of the Chinese. Still another term, "Limin", is sometimes used, the meaning of which is uncertain. The usual translation is "The Black-haired Race", but Archibald Little says that a more accurate rendering would be "Race of Plough-men". On the question of terminology among the Chinese Reclus, a noted French geographer, says: "There is no precise natural term of general acceptance either for the country or the people, and the same is largely true of the mountains, rivers, provinces, and inhabited districts, the names of which are mere epithets, descriptive, historical, military or poetical, changing with every dynasty, or replaced with other epithets of an equally vague character."

Such an uncertain terminology renders the study of the geography of China particularly difficult, a difficulty further complicated by the many systems of romanization used to express the Chinese characters for the names of places and of geographical features. To all this must be added the lack of accurate maps. There is no map of China approaching the degree of accuracy found in the maps of Europe and America. There has never been a comprehensive instrumental survey made of all China, nor of any large section of it away from the coast line. Few, if any, points in the interior of China have been located by astronomical observations with the degree of accuracy demanded by our Coast and Geodetic Survey. No extensive chains of triangulation connect distant and widely separated points of the interior with the coast. Some triangulation has been done, along the coast and in some of the more accessible parts of the country, but in general such efforts have been for some special purpose and were not designed as part of a comprehensive survey of the whole country. It is very much the same in comparative elevations. The more important navigable rivers have been surveyed and many railway surveys have made. In some sections extensive mining surveys cover considerable areas. So far the data in some of these mine and



A Graphic Reproduction of the Size of China

railway surveys have not been made available to the public. In general, the elevations in the interior of China have been determined by barometrical observations and in many instances are merely approximations. Precise leveling, such as is done by the Coast and Geodetic Survey, has not been attempted in China beyond the limits of steam navigation.

The maps that we have of China have been compiled from many and varied sources of information. For thousands of years the Chinese have been making observations on the form and relief of the land in its general features. These observations have been embodied in general descriptions, rough sketches, and maps of various kinds, their characteristic feature, particularly of the maps and sketches, being indifference to precision. The Shu-king or "Book of Annals", relates that the great Emperor Yu, some twenty-two centuries B. C., had maps made of the then nine provinces together with descriptive matter of the mountains, lakes and other features. This was perhaps the first topographical survey made by man. Under the Han Dynasty in the second century A. D., there existed a department of the government that, from the nature of its functions, might be called a topographic office. It was intrusted with the survey of the land and the preparation of maps. From that time onward such work was continued and many Chinese maps have been made. These maps lack a sense of proportion, are not to scale, and the topographical features are generally approximations. An isolated peak, a range of mountains, or a whole mountain system, have been given equal prominence and often designated by the same name. Their unit of measure, the "li", has never been standardized. It is usually given as about three to the mile, but it has varied in different periods and in different sections from 185 to 250 to the degree. Furthermore, it is not infrequent in China to hear that the distance from A to B is greater or less than the distance from B to A—an appreciation of relativity quite antedating Dr. Einstein.

The production of maps over many centuries did not seem to develop any improvement, but rather tended to the accumulation of errors. It is probable that the maps made during the early part of the seventeenth century, —toward the close of the Ming Dynasty, were not as good as the one made under the direction of the great Yu, thirty-nine hundred years earlier. Aside from the fields of philosophy, art and letters, the Chinese do not appear to have developed an appreciation of the critical faculty, and, a tendency to approximate may be listed as one of their outstanding characteristics. Certainly in map production accuracy was not a guiding principle. No improvement was shown until the Jesuit missionaries entered China in the seventeenth century. Martino Martini produced a map based on native maps, modified from his own observations and accompanied by critical notes. Toward the close of this century the Jesuits were made the official astronomers and mathematicians of the empire. They were thus able to make astronomical determinations of many points and from the careful notes made on their

visits to distant parts of the empire, they were able to make great improvements in the existing maps of the country.

During the reign of Kang-hsi (1662-1723) the Jesuits, Bouvet, Regis, and Jartoux, were commissioned by the Emperor to prepare a map of his empire. This map compiled from existing Chinese maps, observations they themselves were able to make, itineraries of travelers, and such general information as they could gather. They were ten years on this work and from their map D'Anville prepared the atlas from which all subsequent maps of China have been more or less reproductions. It is the map to which the explorers of China have referred their observations. The Jesuits were aided in their work by the fact that every prefect in the empire habitually prepared sketches and general descriptions of their prefectures, and while these sketches were generally grossly out of proportion, they were fairly reliable as to the relations of towns to waterways, extent of rivers and boundaries.

Since then many distinguished travelers have traversed the country in many directions and have prepared route maps with critical notes which have greatly aided in correcting the maps of the Jesuit Fathers. The Chinese Maritime Customs has surveyed the coast and large sections of the great rivers, further improving the old maps. The railway surveys have furnished much data, though unfortunately many of the surveys remain pigeon-holed in the Yemens of Peking and have not been made available to the cartographer. Other agencies have made many surveys of limited areas from time to time. The extension of the telegraph over widely separated regions of the country has greatly facilitated the determination of longitude and it may be stated that the longitude of all the principal cities has been determined to within five minutes of longitude. Magnetic surveys have not been made to an extent or carried out over a sufficient period of time to determine the magnetic variations to any satisfactory degree. But, little by little, the map of China is being improved.

In the older atlases the Chinese Empire was shown as including Tibet, Chinese Turkestan, Mongolia, and Manchuria, with a total area of 4,376,000 square miles. In general the more recent maps still show these territories as the Chinese Republic. However, the "Chinese Republic" is a term of rather uncertain significance, and these outer or peripheral territories can not be said to be ruled by China. It seems to have been a traditional policy of the Chinese Empire to surround China proper by a chain of buffer states or territories controlled by the empire, the effectiveness of the control varying with the vigor of the ruling dynasty. China is still surrounded by these buffer territories but the control has passed or is passing to others. What seems to be a survival of the old traditional policy may be seen, to the north and west, in the half dozen Special Administrative Districts—very recently constituted as new provinces—with more or less uncertain boundaries, and representing the salvage from Mongolia and Tibet. China is now essentially the eighteen

provinces with an area of about 1,532,000 square miles, and a population of something like 400,000,000. (See Map No. 1.)

China extends through 23 degrees of latitude, 20th to 43rd parallels, and through some 26 degrees of longitude. It is bounded on the north by Mongolia; on the east by Manchuria, Gulf of Pechihli, Yellow Sea, East China Sea and the Formosa Strait; on the south by the South China Sea and French Indo-China; and, on the west by Burma, Tibet, and Sinkiang or Chinese Turkestan. Except for the boundary separating China from French Indo-China and Burma, the land frontier of China is more or less uncertain. This vague and shadowy nature of China's boundary is a consequence of the wild, rugged and barren character of the northern and western frontiers, combined with the long period of political instability within the country.

If a map of the United States is placed over one of China to the same scale, with equal latitudes coinciding and the 75th meridian west longitude of the United States falling along the 120th meridian east from Greenwich, some interesting comparisons may be made. It will be seen that Philadelphia and Peking (now Peiping); Washington, D. C., and Tientsin; and Chungking, head of steam navigation on the Yangtze, and New Orleans, have very nearly the same latitudes. The provinces of Kwangtung, Kwangsi, and more than half of Yunnan, lie farther south than the southern extremity of Florida. Canton and Havana have the same latitude. From Tientsin, the great port of North China, to the extreme western border of the province of Kansu, is a distance similar to that from Washington, D. C., to North Platte, Nebraska. From Tientsin to Batang, on the Tibetan border, is roughly equal to that from Washington to Houston. If one should start from say, Roanoke, Va., and travel due east or west, half way around the world, he would find himself on the shores of Lake Koko Nor, just across the western frontier of China proper. (Sketch No. 1a.)

The general shape of China is somewhat like that of a fan, with the handle represented by the northwestern part of the province of Kansu, and the outer edge suggested by the eastern and southeastern borders. Politically China is divided into eighteen provinces, a division dating from the reign of the famous Emperor Kien-lung (1736-96). The belt of a country separating the eighteen provinces from Mongolia and Tibet has recently been designated as six new provinces, but their boundaries are uncertain. Geographically China is divided into three great natural divisions roughly paralleling each other from west to east, and conforming generally to the three great river basins of the country,—Hoang Ho (Yellow River), Yangtze, and Si Kiang (West River). The water-sheds of these basins are in the main defined by the diverging ranges from a single great mountain system.

The Mountain Ranges Of China

To gain an appreciation of the mountains of China it is necessary to consider the relief of the country in relation to the rest of Asia, or at least

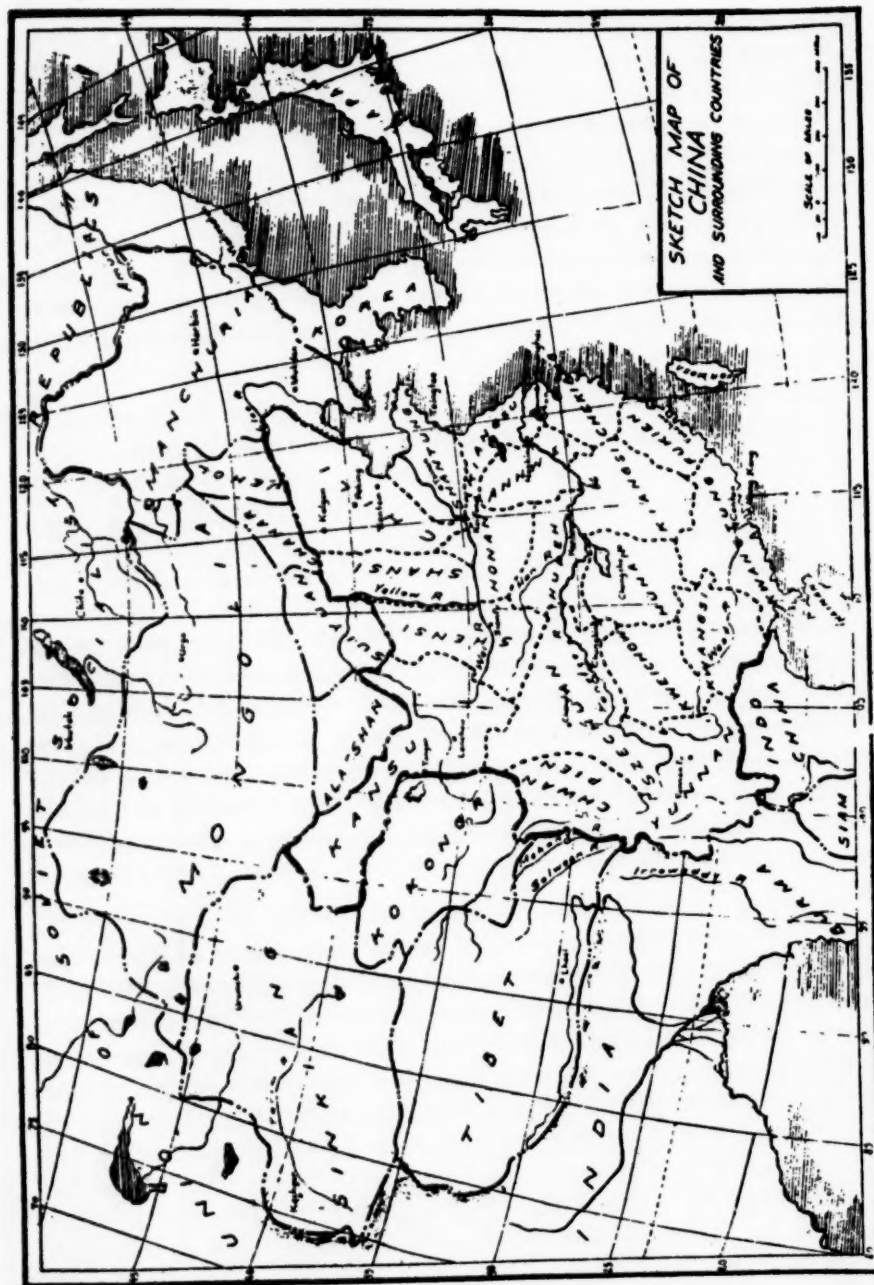


Plate 1

from the great upland mass of Central Asia eastward. The orography of the Asiatic continent is striking in several particulars, the outstanding one being that the great mountain systems of the continent radiate from a relatively small central area. If lines are drawn on a map of Asia along the 35th and 39th parallels of latitude from the 72nd to the 75th meridians east of Greenwich, the inclosed region will include the initial sectors of five of the outstanding mountain ranges of Asia and of the world. This region has an area roughly equal to that of the state of Pennsylvania, and nowhere else in the habitable latitudes of the world can a similar area be found to compare with it in altitude, ruggedness and inaccessibility. In the northern part of this region is the Pamir Plateau, not inaptly styled the "Roof of the World", and it is from the Pamir Plateau that four of the great ranges radiate. To the southwest lie the Hindu Kush, to the southeast the Karakorum, to the east the Kuen Lun, and to the northeast the Tian Shan. The Himalayas lead off from south of the Pamir Plateau and separated from it by the Indus River. The Himalayas tend to a southeasterly direction roughly paralleling the Karakorum range. These ranges are the loftiest in the world, only approached in altitude by the Andes in South America. A great many of the peaks are above 25,000 ft., while Mt. Everest in the Himalayas is more than 29,000 ft. (Map No. 2.)

The Tian Shan range leading to the northeast from the Pamir may be traced, not however, without several clearly defined breaks and extensive transverse ranges, under the names Tarbagatai, Altai, Sayan, Daurian Alps Yablonovoi, and Stanovoi mountains to the East Cape on Bering Sea. The Tian Shan, Tarbagatai, Altai, Sayan and Daurian ranges marked in general the the western and northwestern boundary of the Chinese Empire at the beginning of the present century, and still, so far as is generally known, separate the Soviet Republics from Chinese Turkestan (Sinkiang) and Mongolia.

The Kuen Lun range leading to the east of the Pamir Plateau is sometimes referred to as the backbone of the Asiatic continent. The outlines of this range are not so bold and rugged or its peaks so high as are those of the Himalayas, which is due in some measure to the fact that it is a much older geological formation. The Kuen Lun mountains are flanked on the south by the lofty Tibetan Plateau and on the north they drop off into the Tarim basin in a series of terraces. The range divides in roughly latitude 36°, longitude 85° E, the main axial range continuing almost due east and the branch range bears off to the northeast. This branch range is known in its initial sector as the Altyn Tag. In the neighborhood of latitude 39°, longitude 96° E, it begins to broaden out into a series of lofty parallel ranges leading east and southeast, known under the general name of Nan Shan (Shan is a Chinese term for mountain, applied indifferently to a single peak or a range). To the north Lanchow-fu in the province of Kansu the general trend of these mountains turns to the northeast, roughly paralleling the Hoang Ho or Yellow

River. This sector is known as the Ala Shan mountains. Beyond the great northern bend of the Yellow River these mountains continue generally eastward and are known successively as Kara Narin Ula, In Shan, Munni Ula, Sirung Bulik, Sunna Hada, Shara Hada, and other parallel ridges forming the southern escarpment of the Mongolian plateau. These ridges contract near the converging point of Mongolia, China, and Manchuria, and connect with the Great Khinghan range. The Great Khinghan mountains tend in a northerly direction, terminating in northern Manchuria near where the Argun and Shilka rivers unite to form the Amur River. This branch from the Kuen Lun as traced under its various names, forms in much of its extent, the northern bulwark of China and west of the Yellow River the Great Wall follows some of its ridges.

The main stem of the massive Kuen Lun continues, as mentioned above, almost due east across northern Tibet and Koko Nor to the frontier of China proper. In northeastern Tibet and in Koko Nor several ranges branch off to the south, crossing eastern Tibet and the western part of the province of Szechwan. These branch ranges from the watersheds separating the upper Hoang Ho, Yaling, Yangtze, Mekong and Salween river. After leaving the great Tibetan plateau these ranges are narrow, roughly parallel and separated by the deep narrow gorges of the rivers mentioned. These mountains are difficult to approach and have been little explored. They continue on to the south and may be traced into Yunnan, Tonkin, and Siam. Some of these off-shoots from the Kuen Lun mark, in a general way, the western frontier of China.

In eastern Koko Nor the Kuen Lun is called on most maps the Burhan Bota and a diverging range bearing slightly southeast, is called the Amne Machin. The Yellow River flows in its upper reaches along the south of the Amne Machin range to near the Chinese frontier where it turns north describing roughly a letter "S", and cuts through both these ranges of the Kuen Lun before entering China proper. It must be noted that Koko Nor is almost wholly unexplored, that the mountain ranges of this region are very imperfectly known, and that scarcely any two maps give these mountains the same location or the same name.

East of this "S" and within the confines of China proper, what appears to be the main axial stem of the great Kuen Lun range continues almost due east across China and is known as Si'king Shan in Kansu, Tsingling Shan in Shensi, and Funiu Shan in Honan. In Honan the trend becomes southeast crossing the province and terminating in low hills in southwestern Anhwei. The continuation of the Amne Machin range east of the Yellow River, appears to be the Min Shan, marking the boundary between the provinces of Kansu and Szechwan, and the Tapa Shan separating Shensi and Szechwan. The Tapa Shan bears southeast to the Yangtze River, which separates it from the northeastern extension of the Kweichow table-land. It is in cutting through this mountain mass that the great river has formed the famous

Yangtze Gorges. South of the Yangtze the principal range is called the Pamien Shan and the general trend seems to be the southwest into Yunnan. From the western sector of the Min Shan a succession of ranges lead southward across Szechwan called the Balan Shan and Ta Liang Shan, forming the eastern buttress of the great Tibetan highlands. The series of great parallel ranges running north and south across Szechwan from the Balan Shan to the western frontier of China is called by Richard the "Szechwan Alps".

In Yunnan the ranges leading down from Tibet and Szechwan seem to merge with a series of ranges running generally eastward to the northeastern corner of the province of Kwangtung from whence the trend is northeast to the coast opposite the Chusan Islands, a little south of the mouth of the Yangtze River. These mountains lead off from the Kweichow table-land mentioned above, and from them in turn several ridges branch off to the north toward the Yangtze in the provinces of Hunan and Kiangsi. This group of mountains is known by various names in different sections, the more general name being Nan Shan or Nan Ling. Nan Ling is perhaps the better term as it avoids possible confusion with the Nan Shan in northwest Kansu and Koko Nor. Baron Richthofen, a famous German geologist and explorer, made a rather extensive study of the geological structure of this area and he says: "I believe I may consider as established the existence of an axial chain or rather of a narrow belt of chains, which follows approximately the middle line of Nanshan, in a direction from S. W. by W., to N. E. by E., and to which all the other parallel belts are in some respects subordinate". (Letters) He also was of the opinion that this chain was represented by the Chusan Islands and continued on to Japan, through Kiushiu and the islands of the Inland Sea to the high ranges northwest of Fujiyama.

The Karakorum mountains lie between the Indus River and the Kuen Lun mountains. The general trend is from N. W. to S. E., from the Pamir region to roughly the 85th meridian. Thence the trend is eastward for some ten degrees a little to the north of the 30th parallel. The range then bears to the south marking in a general way the watershed between the Salween and the Brahmaputra-Irrawaddy basins. The section of this range which crosses Tibet was called the Trans-Himalayas by Sven Hedin, the great Swedish explorer, who was the first to establish the identity of these mountains as a separate range. On some German maps of Tibet this range is called the Hedin Mountains. From the Pamir Plateau eastward to about the 90th meridian this range forms the southern boundary of the great Central Asian drainage area.

South of the Karakorum-Trans-Himalaya range and separated from it by the Brahmaputra-San Po, Satlej, and Indus rivers, lie the mighty Himalayas—the highest mountains in the world. The Indus River separates this range from the Pamir Plateau, the Brahmaputra-San Po River turns its southeastern flank, and the Satlej cuts right through it near the boundary between Kashmir

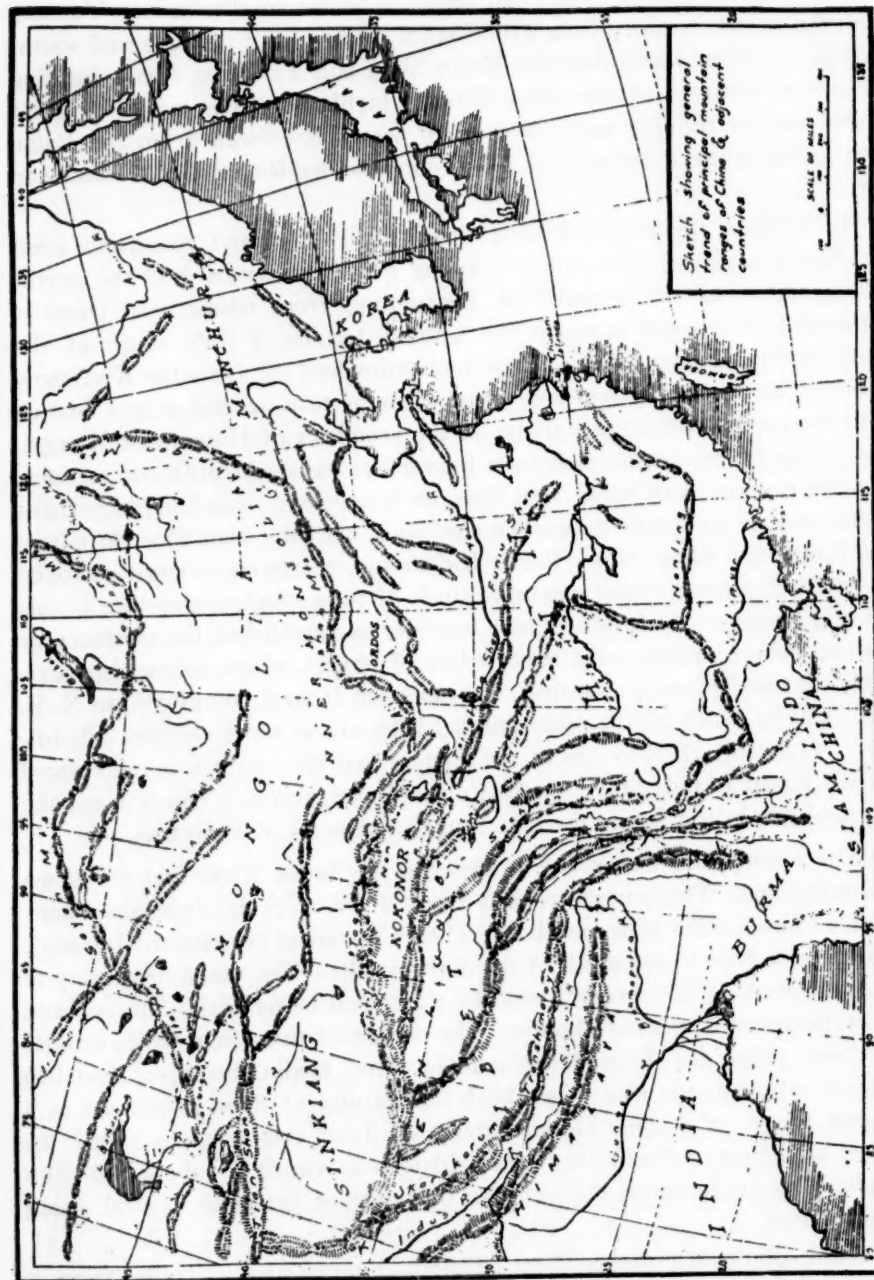


Plate 2

and Tibet. Geologists say that the Himalayas were formed at a much more recent geological period than the great ranges to the north.

The Himalaya, Karakorum-Trans-Himalaya and Tian Shan mountains, while not at any point within the confines of China proper, are mentioned in this discussion because of the barriers which they form around China and thus contribute so much to the isolation of the country. China lies within the ramifications of the mighty Kuen, Lun, and the lofty chains of the northern and southern branches of this range very effectively complete the isolation of China from the rest of Asia.

The ranges ramifying from the Kuen Lun gradually decrease in altitude from west to east. Some of the peaks in the western Kuen Lun are near 24,000 feet. The Altyn Tag and Nan Shan have several peaks around 20,000 feet, the Ala Shan a few over 11,000 feet, the In Shan around 9,000 feet, while the Great Kinghan range has some peaks reaching around 7,000 feet. The central stem of the Kuen Lun drops to the neighborhood of 12,000 feet in the Min Shan and Tsingling Shan, while farther east the Funiu Shan averages about 2500 feet with a few peaks rising above 6,000 feet. The mountains of the southern wing of the Keun Lun reaching down into Tonkin have not been explored to any great extent. However, in western Szechwan there are many peaks that are known to be over 20,00 feet, the general elevation falling away to the south and east. The Nanling Mountains, while offering effective barriers to communication, are not so lofty. They have few peaks reaching an altitude of 7,000 feet.

It is not to be inferred that the orography of China is so simple as the foregoing remarks might possibly indicate. It is only the general trend of the main mountain masses that has been considered. The numberless cross ranges, detached masses, plateaus, plains, hills and valleys, all believed to be more or less subordinate to the great ranges outlined, give to China a very confused relief. The lowlands constitute a relatively small portion of the entire area, so that taken as a whole, China is distinctly a mountainous country. A significant characteristic of the relief of the country is the absence of volcanic disturbance over the greater part. Only in the northeast, in the mountains of Shansi and Chihli, and in the Shantung Peninsula, have evidences of volcanic activity been noted.

Major Geographical Divisions

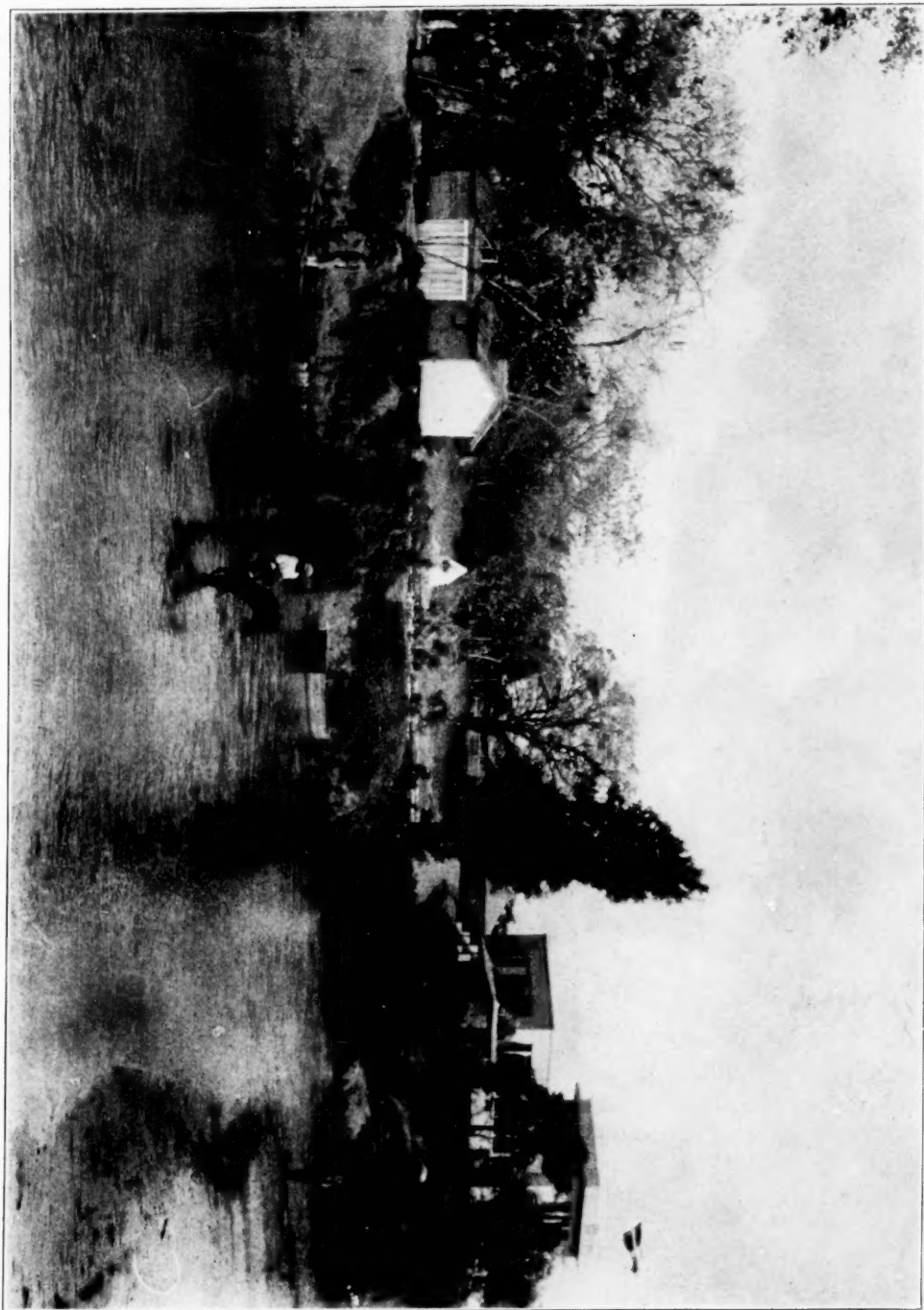
A study of the geography of China is greatly facilitated by considering under the heading of the three great natural divisions of the country. These divisions correspond in large measure to the three river basins mentioned before,—the Hoang Ho or Yellow River Basin, the Yangtze Basin, and the Si-kiang or West River Basin. Strictly speaking these three great rivers do not drain the whole of China. A portion of the southeast coast, including the province of Fukien and parts of the provinces of Chekiang and Kwangtung, drains into the sea through several small coastal rivers. The province

of Yunnan has a most diversified drainage, the waters of this province reaching the sea through the widely separated mouths of six great rivers—the Yangtze, West, Red, Mekong, Salween, and Irrawaddy Rivers. Small sections of the provinces of Kansu, Shansi and Chihli, lie beyond the three great basins mentioned; but these exceptions constitute such a relatively small part of the whole of China and the general characteristics of each are so similar to the great basin to which it is contiguous, that, for the purposes of this study, there is little distortion in considering the whole of China as falling within the three river basins outlined above. (See map No. 3.)

The three great basins of China roughly parallel each other from west to east, a condition which largely accounts for the general similarity in the products of the soil throughout each of the three basins. The great trunk rivers of these basins together with their affluents, give to China an exceptionally well water surface. In fact there is no equal area in the world served by a more generous distribution of waterways and by waterways that are utilized to so great an extent as China. Particularly is this true of the Yangtze system. Two of these rivers, the Hoang Ho and Yangtze, in length and in volume of water, rank with the great rivers of the world. The water-sheds of the three great river systems of China are rather difficult to trace from the existing maps and this difficulty is increased by the peculiar nature of the lowlands extending from the Yangtze to the Gulf of Pechihli. The situation is further complicated by the erratic course of the lower Hoang Ho and the very extensive system of dikes for the control of the waters of the lowlands. As a consequence any delineation of the water-sheds of the Hoang Ho and Yangtze in their lower reaches must of a necessity be somewhat arbitrary.

The Yangtze and Hoang Ho, in common with several of the large rivers of Asia, have their origins in the lofty Tibetan Plateau and flow for several hundred miles roughly parallel and scarcely more than one hundred miles apart. On entering China proper their courses have widely diverged, the Hoang Ho flowing to the northeast and the Yangtze to the south. The two rivers again approach each other in central China, near longitude 110° E, to within 250 miles, and thence flow roughly parallel to the sea.

The characteristics of the two rivers and their basins are so widely different that the water-shed separating them is generally considered as the line of demarcation between North China and South China. The region north of this divide is distinct from the rest of China in every essential feature:—climate, food, character and mode of life. The northern region, the Hoang Ho Basin, is dry, millet is the staple food among the people and beasts of burden are in general use. The south is wet, rice is the staple food, water transportation is general and beasts of burden are rare. The south is the region of the bamboo which occupies such an important place in the economy of the Chinese. A more detailed consideration of these regions,



On the border between Santo Domingo and Haiti where the Massacre River separates the towns of Dajabon, Santo Domingo, and Guanaminthe, Haiti. The large building on the right is the Customs House and Military Headquarters on the Dominican side. On the Haitian shore stands a member of the Garde à l'Haiti; two Dominican soldiers stand on the opposite bank.



The National Palace, Santo Domingo City

beginning in the north with the valley of the Hoang Ho, will more fully develop these general characteristics.

The Basin Of The Hoang Ho Or Yellow River

The northern water-shed of the basin of the Hoang Ho is, in general, coincident with the southeastern boundary of the great Central Asian Drainage Area which extends from western Mongolia westward to include the Caspian Sea. This enormous region comprises more than 4,000,000 square miles, has no outlet to the sea and is characterized by its great aridity. The wide variation in altitude throughout this region is significant. Just to the east of the Pamir Plateau the peak, Mustag Ata, is said to rise to 25,788 ft. The Caspian Sea is some 85 feet below sea level while in northeastern Sinkiang or Chinese Turkestan, near the town of Turfan, there is a small depression 426 ft. below sea level. It is the prevailing opinion among those who have investigated this area, that a slow process of dessication has been going on for many centuries throughout Central Asia, transforming what were once fertile and populous sections into sandy deserts. As this arid region borders so closely on the Hoang Ho, it probably accounts in large measure for the prevailing dryness of the Hoang Ho Valley. Thus the basin of the Hoang Ho may be considered as a transition region from the extreme dryness of Central Asia to the moist regions of central and south China.

The divide separating the Hoang Ho from the Yangtze Kiang within the limits of China follows generally the crests of the Min Shan, Tsingling Shan and Funiu Shan. As the Funiu Shan approaches the lowlands it becomes increasingly difficult to trace the water-shed between the two rivers. In fact the delineation of the northern and southern boundaries of the lower Hoang Ho Basin from northern Shansi and Central Honan respectively, to the sea is highly arbitrary. It can perhaps be better understood by proceeding westward from the sea.

A reference to the sketch showing the shiftings of the Hoang Ho during three thousand years will show a mighty delta with its arms extending from Tientsin to the mouth of the Yangtze. Near the center is the mountainous peninsula of Shantung which was once an island, or perhaps, two islands. This island has tended to deflect the lower Hoang Ho northward and southward, though it would appear that the river has in the main entered the sea north of Shantung. The southern part of this great delta is now included in the Hwai River Basin, occupying the region between the Hoang and the Yangtze. Some of the tributaries of the Hwai are undoubtedly former channels of the Hoang Ho. It seems quite certain that in remote times the Hoang Ho and Yangtze entered the sea through the same channels. From the sketch referred to, it will be apparent that at one time or another, all the principal rivers of the province of Chihli (Hopei), with the exception of the Lwan, have flowed into the Hoang Ho. The great Chihli Plain, and in

fact the greater part of the lowland west of Shantung, has been built up by the Hoang Ho. Thus it does not seem overly arbitrary to consider the divide between the Pei Ho and the Lwan as part of the northern boundary of the Hoang Ho Basin from the sea to the Mongolian Plateau.

Prior to 1852 the Hoang Ho entered the sea south of Shantung. In that year it changed its course in the vicinity of Kaifeng, provincial capital of Honan, and cut a channel to the sea north of Shantung. The river is diked from some fifty miles west of Kaifeng to the sea, and normally none of the water from the country south of the dike along the right bank enters the river. This process of diking has been carried on for so many centuries that the level of the Hoang Ho, even at low water, has been raised several feet above the surrounding country. Thus the river has ceased to perform the function of draining the great lowland of China but instead is always likely to flood it. So far as drainage is concerned the lower Hoang Ho is more like a gigantic aqueduct than a river. (See Map No. 4.)

The Hwai River with its numerous tributaries, normally drains into the Yangtze as well as directly into the sea. The drainage of the entire lowland between the Hoang and Yangtze has been considerably modified by such works as the Grand Canal, innumerable dikes and lesser canals. Considering the nature of the country and the general character of its products, the southern limit of the lower Hoang Ho Basin may reasonably be considered as following roughly the 35th parallel from the sea to the Grand Canal and thence West by South to the Funiu Shah in central Honan.

For a comparative estimate of the extent of the Hoang Ho one may refer again to a map of the United States superimposed on a map of China. If one can imagine a river in the United States flowing through the same latitudes as the Hoang Ho, it would rise in western Oklahoma, flow eastward across the state entering Arkansas near the junction of that state with Oklahoma and Texas, turn abruptly west into Oklahoma again, then east across Arkansas, northeast across southeastern Missouri and southeastern Illinois, east across Indiana into Ohio where it would turn abruptly south across Kentucky and Tennessee to near Atlanta Georgia, and then across South Carolina and North Carolina into Virginia, where it would empty into Chesapeake Bay near the mouth of the Potomac.

The Hoang Ho is about 2700 miles long, rising in the western part of that portion of Tibet known as Koko Nor. Its elevation at the source is about 15,000 feet but at the point where it enters China proper it has dropped to 8,000 feet. At Paotow, just before it makes the great turn to the south, it is 3,000 feet above sea level, and at the Tungkwan Gorge, 375 miles south of Paotow, and the last great bend in its course, the elevation is 1,000 feet. At Tungkwan it receives its only important tributary, the Wei River, flowing from the west. It is in the vicinity of Kaifeng, some fifty miles below the crossing of the Peking-Hankow Railroad, that the great variations in its lower course have begun. It is also in this section that the most destructive

breaks in the dikes have occurred. The area of the basin inclosing this river has been variously estimated, but it is believed that as delimited herein, a liberal estimate would be 400,00 square miles. Included in this region are all or portions of six provinces, Kansu, Shensi, Shansi, Honan, Chihli, and Shantung. The Hoang Ho is unique among the great rivers of the world in that it receives only one affluent of any importance in its entire extent; in the extraordinary angularity of its course; in the perils which it offers to navigation; in the eccentricities of its lower course; and, in the sum total of misery and affliction it has visited on humanity.

The whole of the Hoang Ho Basin lies within the boundaries of China proper and those Special Administrative Districts not yet alienated from some degree of Chinese control. The western section of the basin is included in the district of Koko Nor, called by the Chinese, Ching Hai or "Starry Sea", and the province of Kansu. Koko Nor, the homeland of the Tanguts, is a region few if any parts of which are below an elevation of 10,000 feet. It is a wild, practically unexplored territory, occupied by scattered bands of nomads and a few lamaseries, and has little or no agricultural wealth. Very little is known of the mineral possibilities of the country.

Kansu, the third largest province in China, is also a wild and comparatively little known region. Many centuries ago it was included in the Kingdom of the Tanguts and at the present time it is the stronghold of militant Mohammedanism in China. Routes of communication are few and intercourse with the rest of China much restricted, particularly in recent years. The Hoang Ho traverses the province from S. W. to N. E., but its use as a highway of commerce is greatly restricted owing to the many falls, cascades and rapids that abound in its course. It has an average fall through the province of a little more than 8 feet per mile. The river is, however, much used for irrigation purposes and renders extensive areas of the province highly productive.

The chief crops are wheat, maize, millet, sorghum, cotton, tobacco, peaches, pears, melons, and—the poppy. The cultivation of the opium poppy has greatly increased in recent years owing to the unsettled state of the country and demands of the provincial authorities for increased revenue. The mineral wealth is not very well known though it is certain that coal, iron, gold, silver, and petroleum are to be found. The only forests of any extent in the whole Hoang Ho Basin are found in southern and western Kansu.

In recent years Kansu has been visited by several devastating earthquakes. The earthquake of 1926 was particularly violent and covered a wide area. A large portion of the rural population in the affected sections live in caves carved from the prevailing loess formation. The disaster fell at night and whole villages were buried without a trace in the great loess alnd-slides.

The province of Kansu and the entire basin of the Hoang Ho as far east as the western slopes of the mountains in Chihli Province, is covered by this

peculiar formation called loess. The loess region is estimated to cover not less than 250,000 square miles. It is such an unusual formation, determines to such an extent the main characteristics over such a great area, and has undoubtedly been so large a factor in certain phases of the cultural development of the Chinese, that it justifies a rather detailed description. For this purpose it seems quite appropriate to quote at some length extracts from the classical description of loess by the distinguished geologist and traveler, Baron von Richthofen:

"The peculiar feature of this formation is, to spread alike over places which differ much in altitude, and, therefore, to fill the gaps between hills, to smoothe away the uneven surfaces of the mountainous

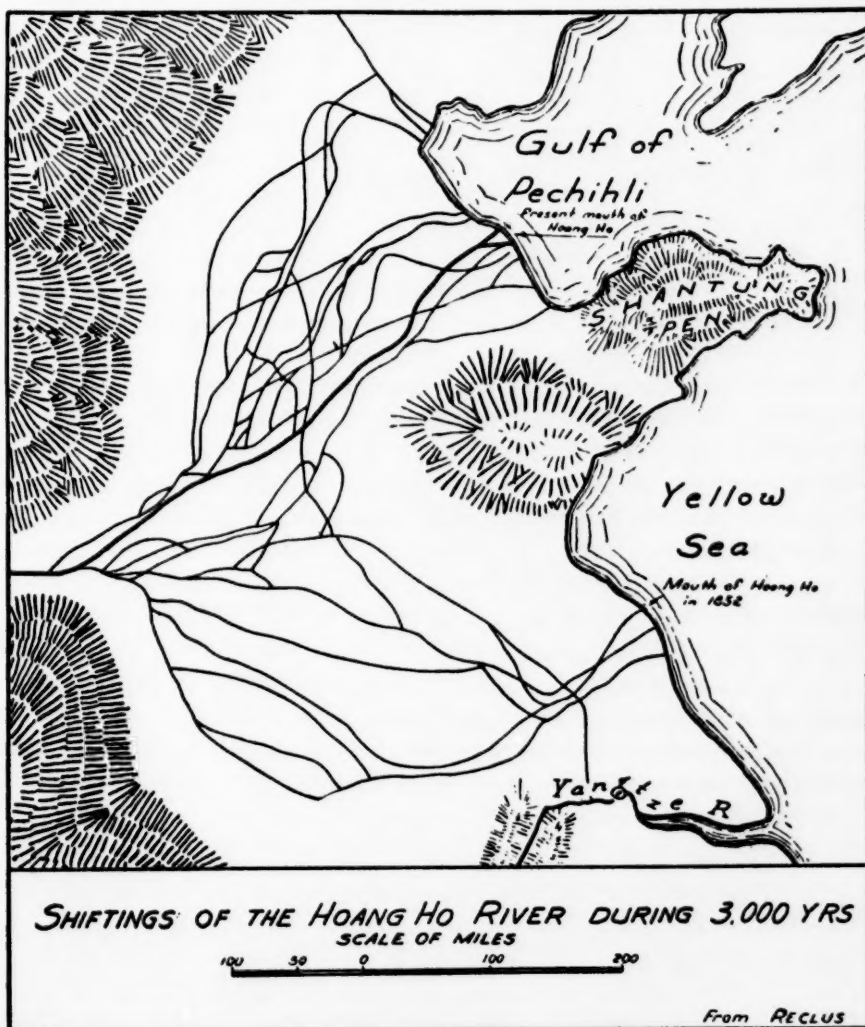


Plate 4

countries, and to create the conditions for agriculture and prosperity, where they would not exist without it. From descriptions given by the Chinese, who apply the specific name "hwang-tu" to the loess, it appears that the same formation exists on a still grander scale (Richthofen is here writing of the province of Shansi) in Shensi, making up the slopes of the broad valley of the Wei River and the entire country of the Ordos, and it spreads, probably, as a cover of great thickness, far into Kansu and Central Asia. It is the loess which gives the Hoang Ho its yellow color. . . . The sediments which constitute the great plain, and render the gulf of Pechili and the Yellow Sea so shallow, are chiefly derived from the destruction of the cover of loess.

The loess is among the various substances which would commonly be called "loam", because it is earthy and has a brownish yellow color. It can be rubbed between the fingers to an impalpable powder which disappears in the pores of the skin, some grains of a very fine sand only remaining. By mechanical destruction, such as is caused by cart-wheels on a road, it is converted into true loam. When in its original state, it has a certain solidity and is very porous, and perforated throughout its mass by thin tubes, which ramify like the roots of grass and have evidently their origin in the former existence of roots. They are incrustated with a film of carbonate of lime. Water, which forms pools on loam, enters therefore into loess as a sponge, and percolates it, without in the least converting it into pulp or mud. The loess is everywhere full of organic remains, but I have never seen any other than land-shells, bones of land animals and the numberless impressions of roots of plants. It is not stratified, but has a strong tendency to cleave along vertical planes. Therefore, whenever a river cuts into it, the loess abuts against it or against its alluvial bottom-land, in vertical cliffs, which are in places 500 feet high; above them the slopes recede gradually in a series of terraces with perpendicular front faces. . . . The beds of the affluents which join the river in these places, are no less deeply cut into the loess, and ramify into its more elevated portions like the roots of a tree, every small branch a steep and narrow gulch. . . . You walk on the richly cultivated bottom land of a river and yet do not see a single human dwelling. But as soon as you approach the precipitous walls of loess, on either side, you find it thronged with people like a bee-hive. They live in excavations made in the loess.

It is owing in a great measure to loess that northern China differs much from southern China, as regards scenery, and products, the mode of agriculture and the means of transportation. In the loess regions the mountain ranges are usually buried in loess with their lower portions, and the space between two ranges is occupied by a broad trough of loess, sloping very gently down from either side. There are instances where the trough closes on all sides, so as to form a basin filled with stratified

soil in the bottom, which bears witness to the former existence of a lake in its place. . . . In most instances, however, the slopes of the loess extend down to the river that drains the trough. Then the alluvial bottom-land is, at best, very narrow, while the beds of the rivers are in general wide and sandy, the streams themselves shallow, and, with some exceptions hardly worth noticing, unfit for navigation. In some cases, as on the Wei river in Shensi, there is a gradual slope on one side of the river and a steep mountain wall on the other. Besides occupying the intermediate spaces, the loess spreads over the mountains themselves. Where they form tableland, loess constitutes their flat summits, and the rocks are exposed underneath it, in the eroded water-courses. Where mountain ranges are narrow and precipitous, loess still spreads over the passes; it overtops the rocky precipices, and creates isolated patches of soft soil with gentle outlines, in places at great altitude and difficult of access.

The difference in level of the places where the loess occurs is truly remarkable. Where its hills fringe the plains of the lower Yellow River, they rise only a few hundred feet above the level of the sea. But in climbing to higher regions, one never loses sight of yellow soil. In Shansi I found it largely predominating over everything else at altitudes up to 6,000 feet, and met it in many places of greater elevation, on the Wuai-shan at 8,000 feet. Yet its character is always the same. . . . The loess is always completely unstratified.

It must, however, be remarked, that in many places occurs what may be called regenerated loess, that is, loess carried away by water and redeposited in basin. All alluvial plains in the loess region are underlain by it, and where rivers are cut through the alluvial soil they exposed it to view. This formation is stratified. To a superficial observer it will appear like true loess, but it differs from it in many essential respects. I will only mention these, that it is impregnated with a saline matter which effloresces from the exposed surfaces, and that water will stand in pools and ponds on its surface, while the loess on account of its porosity sucks up water like a sponge. . . .

Next to its mode of distribution and its porosity, the most important feature of the loess is its tendency to vertical cleavage, which gives rise to extraordinary peculiarities in the configuration of its surface. No scenery presents smoother and gentler, and more monotonous outlines than a loess basin if overlooked from a high point of view. The general inclination, in very large basins, seldom exceeds two feet upon one hundred. The country would appear to be most perfectly adapted for cavalry. And yet, loess basins are impassable, even on foot, if the very carefully traced roads are not kept. Who leaves these, is perfectly lost and will have more difficulty in getting ahead, than he would among rocks and cliffs. For in every direction he will find himself suddenly

before a crevice with vertical walls perhaps no more than a few yards wide, yet from 40 to 200 feet deep. Following it in an uphill direction, he will find it to have miles in length, and to ramify into several crevices, and each of these to branch out again, until, by constant multiplication, they become innumerable. Following the first chasm down hill, he will soon find himself on a narrow spit caused by the joining of a second chasm with the first; and if he could follow it further down he would see more and more branches coming in, each of them inclosed between high vertical walls, and increasing in width and depth.

As regards the mode of origin of this formation, the loess of China, like that of Europe (where it exists on a comparatively small scale) has been supposed to be a fresh-water deposit. This supposition is erroneous as regards the loess of northern China, because it extends equally over hills and valleys, and does not contain fresh-water shells. Others have therefore considered it as a marine deposit. This view is more erroneous even than the former, because it would presuppose the whole of northern China to have been submerged at least 6,000 feet beneath the level of the sea in a recent epoch, while there is abundant evidence to prove that such has not been the case. Nor can the theory current in Germany that the loess of the country was produced by glacial action, be at all applied to the loess of northern China. . . . Unbiased observations leads irresistably to the conclusion that the loess of China has been formed on dry land. The whole of that vast country which was covered by a continuous sheet of loess, before it had undergone destruction, was one continuous prairie, probably of greater elevation above the sea than the same region is now. The loess is the residue of all inorganic matter of numberless generations of plants, that drew new supplies incessantly from those substances which ascending moisture and springs carried in solution to the surface. This slow accumulation of decayed matter was assisted by the sand and dust deposited through infinite ages by the winds. The land shells are distributed through the whole thickness of the loess and their state of preservation is so perfect that they must have lived on the spot where we now find them."

(From the Letters of Baron von Richthofen to the Shanghai Chamber of Commerce, 1870-72.)

The central part of the Hoang Ho Basin included in the province of Shensi north of the Tsingling Shan, the district of Suiyuan including the Ordos country, and the province of Shansi. The potential agricultural and mineral wealth of this region is hardly equaled in any other similar area in all China. The general aspect of the region is that of a plateau broken by many ridges, and in central Shansi, by several basin like depressions tending from north to south. Through this region the Hoang Ho describes what may be roughly styled three sides of a rectangle, with its main affluent the Wei River, furnishing the fourth side. The Hoang Ho flows almost due south

between the provinces of Shensi and Shansi and in this part of its course has no valley worth mentioning and few crossings, the land rising abruptly from both sides of the river to the plateau. The few streams entering it in this section are short and flow through narrow canyons cut in the loess.

North of the Ordos country the Hoang Ho has changed its course several times as it has done in its lower reaches. Formerly it flowed farther north than it does now. In the vicinity of Wuyuan, in the Houtao district, these changes in course have been most marked, and has made of the district an exceptionally fertile area where it has been brought under irrigation. Recently surveys have been made here by the China International Famine Relief Commission, and plans made for eventually bringing some two thousand square miles under irrigation at a cost of about \$40 per square mile.

The prime requisite for bountiful crops throughout the loess region is rainfall. However, the rainfall is exceedingly erratic, periods of two and three years drought being of common occurrence. There is some reason to believe that the frequency of these droughts is increasing, as if the arid region of Central Asia is relentlessly encroaching on the Hoang Ho Basin. A point not without some speculative interest is whether or not a few centuries will change the now fertile and populous sections of the provinces of Kansu, Shensi, and Shansi, into desert wastes. The deficiency in rainfall throughout this region could be overcome over extensive areas by modern irrigation projects. The Wei valley in Shensi is one of the most fertile regions in the world, and some twenty centuries ago, under an elaborate irrigation scheme, was the most productive section in China. It is an old saying in China that one good crop in Shensi will feed the province for seven years. But this ancient irrigation system has long since been abandoned and much of the Wei valley is now a famine area in years of even moderate drought.

Two crops are produced annually in this region, the principal items being wheat, cotton, maize, barley, sorghum, millet, hemp, tobacco, fruits, melons and the opium popy. Silk is also produced in southern Shensi. A superior grape is grown in Shansi from which a wine is made that is famed throughout China. Most all the ordinary vegetables are grown in large quantities. The striking feature of the soil is that, though cultivated for thousands of years, it requires no fertilizer to produce a good yield, though the application of fertilizer naturally increases the yield. This feature is in striking contrast to the situation in Central and South China, where the soil without fertilizer will not yield.

(Part two of this article will be published in the next number of the MARINE CORPS GAZETTE.)

THE QUARTERMASTER'S DEPARTMENT; IT'S MISSION AND HISTORY

By LIEUTENANT COLONEL CHARLES R. SANDERSON, U. S. M. C.

THE United States Marine Corps traces its descent from the organization known as the Royal Marines of Great Britain. There was an ancient custom of ships of war carrying detachments of soldiers as small parts of their regular complements, and other times as the major portion of the number of men embarked. This custom, coming down from the Greeks and the Romans, was continued in the British Fleet, but not until the reign of Charles II, about 1664, was there any military organization placed under authority of the British Admiralty. This was accomplished by an Order in Council which directed the organization of "The Admiral's Regiment", in deference to the Duke of York and Albany, who was known as the Lord High Admiral of England. The regiment was designated later as "Regiment of Marines", and in case of war was first to embark on board the fleet for service afloat.

The United States Marine Corps, the outgrowth of the above organization, was originally organized pursuant to an act of the Continental Congress, passed on November 10, 1775. This act authorized the organization of two battalions of marines, and the officers and men of those two battalions, by their faithful and loyal service during the Revolutionary War, laid the foundation of the magnificent organization which today is referred to with pride as the United States Marines. These early Marines took active part in many engagements during the Revolutionary War, notably at the Battle of Princeton, and also on board the American Naval vessels which operated off the British Coast under the command of Commodore John Paul Jones.

At the close of the Revolution, the Marine Corps, like the Continental Army and Navy, went out of existence and it was not until July 11, 1798, that the Marine Corps, by Act of Congress, was brought into being in substantially the same form that exists today. Upon this Act may be based the nucleus of the present day Marines, and since that date, the administrative organization and duties of the Corps have developed along logical lines. There is quoted herewith six sections of the act of July 11, 1798, as follows:

Section 1. Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in addition to the present military establishment, there shall be raised and organized a Corps of Marines, which shall consist of one major, four captains, sixteen first lieutenants, twelve second lieutenants, forty-eight sergeants, forty-eight corporals, thirty-two drums and fifes, and seven hundred and twenty privates, including the Marines who have been enlisted, or are authorized to be raised for the naval armament; and the said Corps may be formed into as many companies or detachments, as the President of the United States shall direct,

with a proper distribution of the commissioned and noncommissioned officers and musicians to each company or detachment.

Section 2. And be it further enacted, That the pay and subsistence of the said officers, privates and musicians, shall be as follows, to wit: To a major, fifty dollars per month, and four rations per days; To a captain forty dollars per month, and three rations per day; to a first lieutenant thirty dollars per month and three rations per day; to a second lieutenant twenty-five dollars per month and two rations per day; and to the non-commissioned officers privates and musicians, conformably to the act, entitled "An Act providing a naval armament," as shall be fixed by the President of the United States: And the President of the United States shall be, and is hereby authorized, to continue the enlistment of Marines, until the said Corps shall be complete; and of himself, to appoint the commissioned officers, whenever, in the recess of the Senate, an appointment shall be necessary. And the enlistments, which shall be made by virtue hereof, may be for the term of three years, subject to be discharged by the President of the United States, or by the ceasing or repeal of the laws providing for the Naval Armament. And if the Marine Corps, or any part of it, shall be ordered by the President to do duty on shore, and it shall become necessary to appoint an Adjutant, Paymaster, Quartermaster, Sergeant-Major, Quartermaster Sergeant, and Drum and Fife-Major, or any of them, the Major or Commandant of the Corps, is hereby authorized to appoint such staff officer, or officers, from the line of subalterns, sergeants and music, respectively, who shall be entitled, during the time they shall do such duty, to the same extra pay and emoluments, which are allowed by law, to officers acting in the same capacities in the infantry.

Section 3. And be it further enacted, That the detachments of the Corps of Marines hereby authorized, shall be made in lieu of the respective quotas of Marines, which have been established or authorized for frigates, and other armed vessels and gallies, which shall be employed in the service of the United States: And the President of the United States may detach and appoint such of the officers of this Marine Corps, to act on board the frigates, and any of the armed vessels of the United States, respectively, as he shall, from time to time, judge necessary; anything in the act "Providing a naval armament" to the contrary hereof notwithstanding.

Section 4. And be it further enacted, That the officers, non-commissioned officers, privates and musicians aforesaid, shall take the same oath, and shall be governed by the same rules and articles of war, as are prescribed for the military establishment of the United States, and by the rules for the regulations of the Navy, heretofore or which shall be established by law, according to the nature of the service in which they shall be employed, and shall be entitled to the same allowance, in case of wounds or disabilities, according to their respective ranks as are granted by the act "To ascertain and fix the military establishment of the United States."

Section 5. And be it further enacted, That the non-commissioned officers, musicians, seamen and Marines, who are or shall be enlisted into the service of the United States; and the non-commissioned officers and musicians, who are or shall be enlisted into the Army of the United States, shall be, and they are hereby exempted, during their term of service, from all personal arrests for any debt or contract.

Section 6. And be it further enacted, That the Marine Corps, established by this act, shall, at any time, be liable to do duty in the forts and garrisons of the United States, on the seacoast, or any other duty on shore, as the President, at his discretion, shall direct.

The peace time duties and war time mission of the Corps, are cited here for these two great divisions are the basis upon which our Quartermaster's Department functions, and may be stated briefly as follows:

"To support the United States Fleet, and to aid the Navy in carrying out that part of the policy of the Government which has been or may be assigned to it. In carrying out this mission, the Marine Corps is called on for the performance of many and varied duties. These may be classified as follows:

- (a) Detachments to guard and protect the navy yards, naval bases, and other naval utilities, at home and abroad.
- (b) Guards for American legations in foreign countries, such guards being under the jurisdiction of the flag officer in command of the naval forces on the station.
- (c) Landing forces to protect American lives, rights, and interests.
- (d) Forces of occupation to restore order and to maintain peace and tranquility in disturbed countries, as, for instance, Haiti and Santo Domingo.
- (e) Detachments for Marine Corps administrative purposes, such as the recruiting service, training stations, supply depots, etc.
- (f) Marine detachments for service on board the vessels of the fleet.
- (g) Expeditionary forces for service with the fleet in war."

William Ward Burrows, a gentlemen of accomplished mind and polished manner, was appointed major and first commandant of the new Marine Corps on July 12, 1798. The Commandant of the Corps was the first supply officer and paymaster, and he was allotted money from funds appropriated and paid all of the bills of the Corps. The first headquarters of the Corps was under canvas, a short distance from the heart of the city of Philadelphia, which was at that time the capital of the United States. When staff officers were finally appointed, by detail from the line, Second Lieutenant Thomas Wharton was made the first quartermaster on January 22, 1799. This scheme of detailing line officers to staff duty was continued until 1834, when details to the staff were made permanent, although officers so appointed held

their lineal rank for purposes of promotion. At this time the title of assistant quartermaster was first authorized. In 1847 the staff was separated from the line, which practice continued until the act of August 29, 1916, when the line and staff were again consolidated into a lineal list for the purposes of promotion. This act authorized the permanent staff officers on duty at that time to hold their staff rank, but prohibited further permanent appointments in staff departments, and further provided that vacancies occurring therein, should be filled by the detail of officers from the line for a period of four years, which practice is at present in vogue.

It may be of interest to note that the second quartermaster, Lieutenant Jacob M. Huger, was the first officer of the new Corps to die, and Major Burrows directed that his brother officers wear "crepe on their swords" for one month.

The early history of the supply system in vogue in the Corps is not well outlined, although numerous letters have been extracted from the old files whereby the method of supplying rations and clothing is stated. The first rations were procured by means of money allowances to the individuals who provided their own food. This practice was later supplemented by the procurement by contract of a ration as a whole from certain individuals at a ridiculously low price. One instance is cited of the price of the ration as fourteen cents. In 1799 there was furnished a ration amounting to twenty-one and a half cents, and this figure is about the average for a number of years until a new method of procuring the ration by components, and furnishing the components to posts was devised by Brigadier General Charles L. McCawley. The first or contract rations consists of a specified amount of stated components being furnished daily for each man, thus a contractor who was awarded the whole ration furnished the components in the ration of the requirements based on the number of men fed. This system, while in vogue for a number of years, was not satisfactory owing to the sameness of the ration. The present system of procuring and furnishing rations, as devised by General McCawley, is thoroughly modern and results in a well balanced ration and good food for the men, provided the cooks are on the job and do their duty.

The non-perishable articles of the ration, such as flour, sugar, canned goods, etc., are procured at Headquarters, or by direction of Headquarters at other places, and stocked at the several subsistence supply depots located at Philadelphia, Quantico, Parris Island, Hampton Roads, San Francisco, Port au Prince, Guam and Cavite, and are supplied to adjacent posts on requisitions submitted by the posts. By this method of purchase the condition of the market is carefully watched, and a great saving is effected by the properly timed purchase of all articles.

The perishable articles of the ration, such as fresh meats, fresh vegetables, fruits, etc., are contracted for locally after being advertised for and award

being made to the lowest satisfactory bidder. In this manner the ration is supplied to the posts and the proper administration of the ration devolves upon the local authority, who is immediately in charge of the mess. In this connection is of interest to note that the Congress authorized the Navy ration for the Marine Corps, which gives us a plentiful and well balanced ration, provided it is properly handled at the point where it is prepared as food. This ration is healthful and abundant, as is evidenced by the statistics taken from the recruit depots, whereby it is shown that a recruit invariably gains weight under intense training unless he has some organic or functional defect in his makeup.

The history of the procurement of clothing and materials necessary in the manufacture thereof is rather vague, but reference is made in early letters to the purchase of uniforms from dealers as the occasion demanded, presumably on adopted specifications approved by Headquarters. The purchases were made when the necessity arose and no large stock was procured to draw from owing to the small number of men to be outfitted. Our present depot system, dates back to about 1857, at which time the Marine Corps had a strength of about two thousand men, or about one-half the size of one of our four regiments organized for duty overseas during the World War. At this time the depot was located in a four story dwelling house at 226 South 4th Street, in Philadelphia, the interior of which was modified to accommodate the small supply of materials that were kept on hand for the manufacture of uniforms, contracts for which were awarded to commercial houses, the materials being furnished by the depot. This early depot had a personnel of one captain, one sergeant as clerk, and four or five privates. This method of buying materials and contracting for the manufacture thereof in uniforms was followed until about 1879, when the material for uniforms was purchased and cut in the depot and given out to women operators to be made up in their homes and brought in weekly.

In 1904, the first building of the present site, at Broad and Washington Avenue, 83 feet on Broad Street and 109 feet on Washington Avenue, was erected, since which time additional buildings have been constructed, or purchased, and altered to suit our purposes, as the Congress appropriated money from year to year. At present the depot covers 2.106 acres, with five and seven story buildings thereon, in which are machine, motor, woodworking and electrical shops, clothing and equipment manufacturing, stationery and printing establishments. In addition are four large outlying store houses, located at the foot of Snyder Avenue, where commissary supplies, camp and garrison equipage and supplies of every kind used by the Marine Corps afloat and ashore, with the exception of clothing, are stored. In 1909 the depot inaugurated the manufacture of practically all equipment and clothing issued by the Marine Corps. During the World War when the strength of the Marine Corps was 75000, about 1500 civilian men and women, and enlisted men, were employed. At this time the depot outfitted and equipped thirty-six

expeditionary units, including four regiments of 4000 men each, for service in France and the West Indies, and over 31 million pounds of various kinds of supplies were shipped on Government bills of lading. This depot is the principal source of supply, and large stocks of various materials noted above are now stored at San Francisco, Quantico, Parris Island, Port au Prince, Haiti, Guam, and Cavite. The various articles of clothing and equipage manufactured and stored in our depot are controlled from the office of the Quartermaster of the Corps at Headquarters where allowance lists, procurement tables and money allotments are compiled and broadcast to the service.

Probably no concern on the face of the globe produces such a wide variety of goods as the depot. Practically everything that the Marine Corps uses is made or stored on the premises. They make hat ornaments and field stoves, mosquito nets and trunk lockers, buckets and condiments cans, and so on down the endless list of things a marine needs in the barracks or field. The really remarkable thing about this depot is its facility in manufacturing widely dissimilar articles.

The history of our uniform is such an extensive subject that I shall only dwell upon it briefly. In the early days when blouses were first worn with the high standing collar, the collars were reinforced by leather on the inside, and thereby originates the term "Leathernecks" Some of the earliest types of uniforms, if presented to the public in this present day and age would offer strong contrast to the present sedate and military clothes. The hats were trimmed with plumes with wide brims and gaudy colors; the flowing lines of the blouse, or tunic, and the trousers would present a picture of elegance akin to the costumes we see displayed in some of our musical comedies, and the galaxy of color would equal an afternoon parade on Fifth Avenue. The true descent of our present uniform may be traced to British ancestry, and our modern uniforms are designed with a view to comfort coupled with service. It is well remarked that the United States Marines are the best dressed troops in the world.

As has been previously stated the bulk of all equipage used in the Marine Corps is manufactured at the Philadelphia depot, and a small portion is contracted for and stored at that depot. This item includes all barracks and office furniture and equipment, cooking and mess gear, crockery and military supplies of every description. From this general stock the other depots are supplied, and posts and ships are required to make requisitions therefor on the nearest depot.

Tables of allowances have been prepared at Headquarters for various units, including expeditionary forces, and these tables are used as a guide in equipping the Corps. During the past twenty years a large number of expeditionary forces have been equipped and supplied with all manner of military equipment from which experience our present tables have been compiled.

An example of the complete manner in which Marines are supplied with

materials of war is the East Coast Expeditionary Force, normally stationed at Quantico, but now widely scattered on foreign duty. This force consists primarily of infantry, which is the backbone upon which our service operates, supported by the various auxiliary troops, such as heavy and light artillery, engineers, airplanes, balloon section, tanks, signal troops, gas company, and a large motor transport, consisting of trucks, heavy and light tractors, reconnaissance cars, touring cars and motorcycles. All the various implements of modern warfare are furnished these troops by the Quartermaster's Department and are procured through purchase in divers ways.

Our first ordnance supplies, such as muskets were loaned to the Corps by the Army and it was quite a long time before the Congress appropriated sufficient funds for the actual purchase. At the present time the Bureau of Ordnance, Navy Department, makes a substantial allowance to the Marine Corps for the maintenance of large guns and equipment furnished by that Bureau. All aviation materials are furnished by the Bureau of Aeronautics, Navy Department, and all other equipment is purchased from the funds appropriated for the Marine Corps. As an example for contrast one of the first appropriations for the Marine Corps was for about \$50,000 annually, whereas our annual appropriation for the present fiscal year, including pay amounts to about \$25,000,000.

In addition to the supply of the various items already mentioned the Quartermaster's Department has numerous other duties, which I shall briefly list as follows:

Provide all military supplies, as well as labor, materials and services; purchase, hire, operate, maintain and repair such vehicles as are authorized by law for the transportation of troops and supplies, furnish and forage all public animals, as well as provide forage and stabling for the authorized private mounts of mounted officers; furnish means of transportation which may be needed in the movement of troops and material; shall pay out of the proper appropriations provided for the Corps all expenses thereof other than those pertaining to the Paymasters' Department; the quarters, barracks and other public buildings and grounds provided for the use of officers and enlisted men are under the direction of the Quartermaster, and he has charge of all repairs and improvements to barracks. Where new construction is contemplated and the amount exceeds \$1000 the work shall be done under the supervision of the Bureau of Yards and Docks, Navy Department, to the satisfaction of the Quartermaster.

The most important step in the education of military men lies in their ability to cooperate and coordinate and in successful organization—these two traits are the underlying principles. The Quartermaster's Department was organized solely for service with the line and to render such service as to build up a smooth working structure that will operate under all conditions. Our present system of detailing line officers to staff positions makes it incum-

bent on all line officers to thoroughly acquaint themselves with the details of staff duty, and the earlier a young officer performs such duty the better equipped he is to perform his line duty.

The Quartermaster's Department is charged with the duty of discharging its functions in the quickest and most economical manner, and to safeguard the interests of the Government in every way within its sphere of activities. Small extravagances lead to large deficits. To accomplish economy with efficiency the full and unselfish cooperation of every individual in the Service is necessary. As an example of an early economy which undoubtedly has resulted in a great saving in the old days when the command was marched in to the first meal of the day a pound loaf of bread was beside each plate, and the man was required to take charge of his particular loaf and bring it to the other two meals. Later on the practice was changed so that one-third of a loaf was placed beside a plate at each meal. The present practice of serving the bread sliced finally convinced all concerned of the saving to be made.

The quartermaster of an organization necessarily depends on the officers commanding the various units composing it for information as to the actual needs of the command in the matter of supply, and unless requests and requisitions are submitted to him showing just exactly what is required, and the amount actually necessary, waste and unsatisfactory conditions of supply are the natural result. The importance of estimating requirements carefully and correctly, and accurately describing articles desired not on the usual allowance lists, cannot be too heavily emphasized for it is necessary that the officers receiving the requests for supply have a comprehensive idea of what is needed, which can only be gained by the cooperation of the officers making the requests in giving a correct mind picture of what is desired. Loss of time and useless correspondence, as well as material delays, are the result of the careless submission of requisitions.

After an officer has received property, or supplies, the duty of conserving such property and preventing waste devolves in him, and a very good axiom for him to follow is to keep in mind the manner in which he would handle such articles if they were his personal property.

In receiving or turning over property of any description an officer should always retain a copy of the receipt for his personal file, for such procedure is businesslike and will often save him the humiliation of being required to pay for government property carelessly handled.

All officers should keep one thing clearly in mind at all times. There is no loose system of accountability by which an officer is relieved of responsibility on flimsy excuses, for careless handling. Once an officer has assumed responsibility by receipting for government funds or property he is only relieved from responsibility therefor by due process of law or regulations. While boards of survey are the usual medium through which property is disposed of, these boards are required to thoroughly investigate all matters brought before them.

They rigidly scrutinize evidence and are required not to recommend the relief of officers, or enlisted men, from responsibility unless fully satisfied that those charged with the care of the property have performed their whole duty in regard to it. In order to avoid being held responsible for losses which must eventually be paid for out of his own pocket an officer should inculcate a spirit of carefulness and a desire to conserve the interests of the government in those under his command by assuming an attitude of care and system which will invariably result in a saving for everyone. Particularly is this advice offered to young officers who are required to run a mess for the first time. They should do things themselves until they know every detail of the working of a mess. They should keep the keys to the subsistence store-room in their possession, and be present at all issues. They figure daily the money allowances which they can spend and keep an account of the daily money value of issues, and with a small amount of trouble they will always know the condition of the mess and will not have to dig down in their own pockets for large overissues. Until they have gained sufficient experience to supervise others they should do the job themselves and keep their own accounts, and the results obtained will certainly compensate them for a little extra work.

Whenever an officer is ordered to relieve another involving property accountability he should not take the word of anyone that the property is in fine shape, but should actually take a physical inventory of the property in person and his peace of mind later on will more than repay him for the trouble involved.

Every officer should thoroughly acquaint himself with the regulations governing the Quartermasters' Department and stick to the letter of the law in all his dealings. In case of doubt he should ask questions and consult officers of longer service whose advice and suggestions will be beneficial.

The various allowances furnished to an officer by the Government are of particular interest to all young officers, especially those involving reimbursement for travel expenses. Whenever an officer is ordered to perform travel from one permanent station to another he should immediately apply to the nearest quartermaster to pack, crate and ship his household effects free of expense within certain allowances, and to furnish him transportation requests for himself and family, if he has one. An officer should always apply for these transportation requests, as reimbursement can only be made in such amounts as the government would have paid had the transportation been officially requested. This amount paid by the Government is affected by certain agreements and concessions, such as land-grant between the Government and the carriers whereby reductions in fares are granted in exchange for transportation requests. If an officer who normally will receive five cents a mile for expenses in addition to the railroad ticket furnished on the Government request, fails to procure a transportation request for the travel he will find himself the loser in a great many cases, so it is sound practice to always secure transportation requests before starting the travel. Pullman requests

are not furnished an officer except where he is traveling with troops when no reimbursement is made, the Government furnishing the actual transportation and Pullman accommodations. However, the Government does furnish both transportation and Pullman accommodations to an officer's dependents who are transported free of expense to the officer on regular change of station orders. There have been a great many decisions by the Comptroller General of the United States on this important subject, and I cannot give it proper weight here without taking up too much space. There are, however, several points to be noted which are most important. Only on a permanent change of station orders may dependents be furnished transportation on Government requests; thus an officer ordered to some temporary duty cannot procure this transportation. On orders to foreign stations the administrative policy of economy makes it mandatory for officers and their families to travel by Government conveyance whenever practicable, and in no instance should an officer pay for overseas transportation for himself or dependents without first having made application to a quartermaster for Government transportation.

In such a limited space as I have given myself it would be a physical impossibility to go into detail concerning all the various phases of the duties of the Quartermasters' Department, and I have tried to give briefly some comprehensive idea of the scope of the work. In these days officers and enlisted men are furnished with the most modern equipment obtainable, and everything is done for their health and convenience. A comparison of the old time bed sack and pillow-case which was taken to the straw shed once a month to be filled with straw, with the modern feather pillow and kapok mattress furnished today, offers a concrete example of the progress which we have made. I can safely say that there are no better supplied troops in the world than our present day United States Marines, and that we of the Quartermaster's Department are always endeavoring to further the interests of the Service by cooperation with the line in forming one solid organization.

THE "HAWAIIAN MANEUVERS" OF 1794

By MAJOR EDWIN NORTH MCCLELLAN, U. S. M. C.

A FLEET of war canoes carrying an expeditionary force of fighting-men appeared off the southeastern coast of Oahu, in November of 1794. Its commander-in-chief was both Admiral of the Fleet and General of the land forces. He was Kaeo, *Moi* or sovereign of Kauai, Niihau, and Maui, and uncle of Kalanikupule, sovereign of Oahu.

The Oahuan king was not surprised by the arrival of his uncle's overseas force. When Kalanikupule received information from his spies that Kaeo was coming with a great force on his way to Kauai, he assembled his chiefs and fighting men in Waimanalo, Koolaupoko district, in southeastern Oahu, to repel him.

Paddling north of Koko Head, Kaeo arrived at Waimanalo Bay. The mission of this invading force cannot be derived. Kaeo may have desired to add Oahu to his dominions. He may have only stopped for rest. He found his landing opposed. Oahuan troops were drawn up on the beach to oppose his landing. Judge Fornander wrote:

Kaeo was repulsed by Kalanikupule's army. His fleet kept at sea exchanging shots with forces ashore. The "commander of the Oahu troops was shot by Kaeo's foreign gunner, *Mare Amara*, near a little brook named *Muliwaiolena*." Gowen asserts that this fellow was "Murray, the Armourer."

At this period of the history of Hawaii nei, the vital area of Oahu appeared to be Waikiki, for it was there that the King maintained his capital and desired most to defend. And it was at Waikiki that Kalanikupule had established his Command Post. Learning of the fighting at Waimanalo, the Oahuan King hastened to the theatre of operations, travelling either around the southern end of the Koolau Mountains via Diamond Head and Koko Head or up the Nuuanu Valley and over the *Pali*. That he travelled the latter route is very improbable for in those early days there was nothing but a precipitous trail leading down to the Windward Side. (And it was over this same *pali* that in the Spring of 1795 Kamehameha drove the Army of Kalanikupule and won Oahu).

A truce, a conference, and Kaeo's invading fleet and expedition shoved off for Kauai. He stopped at Kailua, just north of Waimanalo, for a short spell, and then continued toward his destination. On past Waimea Bay and Waialua Bay, though he may have stopped at these two excellent landing-places to refresh.

On around Kahuku Point and Kaena Point, where he turned south—instead of continuing west of Kauai. But this was the usual thing to do—to stop at Waianae before crossing the Kaieiewaho Channel to Kauai. The fleet of Kaeo came-to-beach in Pokai Bay at the town of Waianae.

Here a disaffection sprang up among his troops, fomented by certain chiefs. Some learned historians say that King Kalanikupule had sowed the seeds of this rebellion in Kaeo's army while at Waimanalo. We will never know the cause, and as far as what happened subsequently, it is not necessary for us to know.

On the eve of his departure from Waianae, Kaeo was informed of a conspiracy to throw him overboard during the cruise to Kauai. Dibble tells us that Kulanikupule instigated the assassination.

"It is better to die in battle!" exclaimed Kaeo, "many will be the companions in death!"

It was a prompt and adequate decision. It rallied around him the malcontents. It drew to him the local inhabitants for many from Waianae and Wailua flocked to his banner.

Orders were issued for the army to march to Waikiki and seize and occupy that vital area. Two routes presented themselves to Kaeo. One through the Waianae Mountains over Kolekole Pass, and the other around the southern end of the Waianae Mountains. The latter path would take him through the Ewa Section, and it is quite probable that it was the route selected by Kaeo for his main force. Undoubtedly small outfits proceeded over Kolekole Pass and other passes to the southward.

At this time there were three vessels anchored in the Harbor of Honolulu (called Ke Awa o Kou, or Fair Haven, or Brown's Harbor). They were the *Lady Washington* (John Kendrick) and two British vessels, the *Jackall* and *Prince Lee Boo*, commanded by Captain Brown. All three supported the operations of Kalanikupule against Kaeo.

Listen to the story as told by Fornander:

"In the month of November, 1794, Kaeo broke up his camp at Waianae and marched on Ewa. At a place named Punahawe he encountered the troops of Kalanikupule. In this first battle Kaeo was victorious, some of Kalanikupule's hired foreigners (from the *Jackall* and *Prince Lee Boo*) were shot by Kaeo's gunner, *Mare Amara*, and the native (Oahuan) troops were routed. Desultory fighting continued for several days afterwards, in all of which fortune still adhered to the arms of Kaeo, who slowly but steadily advanced through the Ewa District.

"Worsted but not disheartened Kalanikupule collected his scattered forces between Kalauao and Aiea, in Ewa, determined to dispute by another pitched battle the progress of Kaeo."

Kalanikupule's defending army was disposed as follows: "His brother Koalaukani occupied with the right wing the raised main road from Kalauao to Aiea; his uncle Kamohomoho with the left wing occupied the shingly beach at Malei; and Kalanikupule himself, with his chiefs, occupied the middle of Aiea."

While Fornander states that Captain Brown with his armed boats occupied a commanding position in Pearl Harbor Lochs off the shore, other evidence seems to show that Captain Brown and his men had withdrawn their support from Oahu after the first reverse and that Captain John Kendrick, American, commanding the *Lady Washington*, at that time encouraged Kalanikupule with his assistance.

"It was when Kalanikupule and Oahu most needed help that Captain Kendrick could not resist the impulse to offer his assistance to Oahu. Kalanikupule accepted. Victory immediately followed."

The Battle of Kalauao was bloodily fought on December 6 (or 12th), 1794. Kaeo advanced through the cultivated fields below and beyond the ravine of Kalauao, near the shores of the Pearl Harbor Lochs. A station on the railroad still carries the name of Kalauao as a reminder of that battle.

"The furious onset of Koalaukani descending from the upland where he was posted is said to have broken the main column of Kaeo's army and decided the fortune of the day."

The "American sailors under Captain Kendrick with their armed boats, stood off shore" in the Pearl Harbor Lochs, "and supported the land forces." Kaeo's defeat was decisive.

The brave Kaeo found shelter in "a small ravine near the shore of Aiea. His yellow feather cloak, the *Ahuula*, betrayed his presence, and his rank, to the men stationed in the boats off shore, who fired at him and his party, while the pursuers rushed upon them from above; and thus, with his face to the foe, like a lion at bay, died Kaeokulani, a perfect type of the personal daring, the martial skill, and the princely qualities that formed the *beau ideal* of a Hawaiian chieftain and the admiration of his contemporaries."

Kaeo by surprise, not only had gained a beach-head, but had secured a position within striking distance of the vital area involved in his mission and plan. Yet the defending army destroyed him and his force on its final defensive line.

"It was on this occasion that the Stars and Stripes flew for the first time over Pearl Harbor waters. What a historical incident both from the viewpoints of America and Hawaii nei. An American armed-merchant-naval force afloat in Pearl Harbor assisting an Oahuan Army to a spectacular victory. What an auspicious American genesis for the Naval Operating Base, Pearl Harbor, T. H.!"

PROFESSIONAL NOTES

Marksmanship Records Of Last Five Years Show Steady Progress

The scale of progression in small arms firing in the Marine Corps for the past five years has been ably demonstrated in both rifle and pistol marksmanship training. The target season just closed has been an active one, particularly in comparison with the preceding two years during which expeditions to China and Nicaragua interfered to a considerable extent with normal target practice. Ninety-four per cent. of the men firing for requalification attained the grade of marksman or better for an average grade beyond the half-way mark between marksman and sharpshooter.

Fifteen thousand six hundred and fifty-six officers and enlisted men of the Marine Corps fired the rifle qualification course for record during the target year 1929. Of this number 14,425, or 92.1%, qualified as Marksman or better. The comparative standing of group firing is classified as follows:

	ER	SS	MM	QUAL	UNQ	FIRED	P. C. Qual
Officers	201	73	68	342	3	345	99.1
Post and Stations	2289	2482	4235	9006	607	9613	93.7
Ships' Detach.....	521	358	319	1198	58	1256	95.4
Recruiting	47	12	4	63	2	65	96.9
Recruits	97	471	3248	3816	561	4377	87.2
	3155	3396	7874	14425	1231	15656	
	20.2%	21.7%	50.3%		7.8%		

The average number of qualifications by groups in each grade per thousand that fired the rifle course during 1929 is summarized as follows:

Group	ER	SS	MM	Unq
Officers .....	.583	.211	.197	.009
Posts and Sta.....	.238	.258	.441	.063
Recruits .....	.022	.108	.742	.128
Ships' Detach.....	.415	.285	.254	.046
Recruiting .....	.723	.185	.062	.030

The following table shows the number of officers and enlisted men who have qualified with the rifle during 1929 and the five preceding years, together with the percentage of qualifications, especially in the grade of expert, in relation to the average strength for each year:

Year	Average Strength	Experts	P. C.	Sharp- shooters	Marksmen	Total Qual.	P. C. Qual.
1924	19614	3682	18.8	3915	6646	14243	72.62
1925	18252	3284	18.0	3590	6841	13715	75.14
1926	17974	3118	17.3	3340	8785	15243	84.81

1927	18013	2518	14.0	2621	5973	11112	61.70
1928	17908	2221	12.4	2248	5712	10181	56.85
1929	18012	3155	17.5	3396	7874	14425	80.08

Pistol firing is also on the upward trend, 10,938 officers and enlisted men firing either the regular qualification or modified practice course. 5,672 officers of the line, of and below the rank of major, enlisted men above the rank of sergeant and field musics fired the regular qualification course, while 5,256 enlisted men fired the modified practice course. A comparison of pistol firing during the past five years is shown as follows:

<i>Year</i>	<i>Course Fired</i>		<i>Total Fired</i>
	<i>Regular</i>	<i>*Modified</i>	
1925	7186	-----	7186
1926	7173	-----	7173
1927	5200	-----	5200
1928	5551	3249	8800
1929	5672	5256	10929

*Adopted during year 1928.

To Gunnery Sergeant Henry P. Crowe goes the distinction of compiling the highest score over the regular rifle qualification course during the target year 1929. His score of 344 attained March 4, on the rifle range at Quantico, Virginia, is 3 points better than that compiled by the high man of the previous year. The next highest score, 339, was made by Sergeant Theodore Knapp. Three other enlisted men finished with scores better than 335, while 49 finished with scores ranging from 330 to 335, and 95 between the scores of 325 and 329. The total number making scores of 325 or better exceeds by 88 the number in the "selected" class for 1928.

Gunnery Sergeants Glenn W. Black and John A. Gustafson are tied for high man over the pistol qualification course for 1929 with 99% each. One hundred and eighty officers and enlisted men made 92% or better over the qualification course for record during the same period.

58 attained a percentage of 92
 46 attained a percentage of 93
 36 attained a percentage of 94
 16 attained a percentage of 95
 9 attained a percentage of 96
 9 attained a percentage of 97
 4 attained a percentage of 98
 2 attained a percentage of 99

National Rifle Match Course Supersedes Qualification Course In Marine Corps And Divisional Rifle Competitions

Beginning with the target year 1930, the course of fire for the Marine

Corps Rifle and Division Rifle competitions will consist of the National Rifle Match course fired over twice. Whenever a competition is not completed in one day, the day's firing will cease at the completion of a stage in order that each stage may be completed for the competitors under as nearly the same conditions as possible. The National Match course will also supercede the qualification course used in firing the Elliott Trophy Team and San Diego Trophy Team matches. The entering of teams in the Elliott and San Diego Trophy matches has been made compulsory for all posts assigned a quota of competitors in divisional competitions, rather than optional.

The quota of rifle and pistol competitors in the divisional competitions for the entire Marine Corps is authorized as follows:

<i>Division</i>	<i>Rifle</i>	<i>Pistol</i>	<i>Place of Competition and Date</i>	
*Asiatic	32	16	Peiping, China	
West Indies.....	35	12	Quantanamo Bay	April 21
Western	45	18	San Diego, Calif.	April 7
Southeastern	40	18	Parris Island, S. C.	May 19
Eastern	95	39	Quantico, Va.	June 2
<hr/>		<hr/>		
Total	247	103		

*The dates for the Asiatic Competitions will be arranged between the Commanding Officer, Marine Detachment, American Legation, Peiping, China, and the Regimental Commander, 4th Regiment, preferably during the latter part of the target year 1930. The medal winner in 1930 will not participate in the Marine Corps competitions of that year, but will be ordered to the United States by government transportation at a convenient time proceeding to Quantico, Va., where they will be permitted to fire for practice only in the preliminary practice and competition proper of the 1931 Eastern Division competitions prior to representing the Asiatic Division in the Marine Corps competitions of that year. The bronze medal winners in the Asiatic competitions who were not ordered to the United States for the 1929 Marine Corps competitions, and who remained in China, will represent the Asiatic Division in the 1930 Marine Corps competitions.

All medal winners in the other four competitions, including distinguished shots winning places, will be transferred to Quantico, Va., to participate in the Marine Corps Rifle and Pistol competitions and Marine Corps Rifle and Pistol Team tryouts. The organizing of the Marine Corps Rifle and Pistol Team will be effected upon completion of the Elliott Trophy Team Match at Quantico, and will then be transferred to Wakefield, Mass., to begin training in preparation for the National Rifle Association and National Matches at Camp Perry, Ohio, which events, it is contemplated, will be held during the first two weeks in September.



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